CALIFORNIA COASTAL COMMISSION
CENTRAL COAST AREA OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(408) 427-4863
HEARING IMPAIRED: (415) 904-5200

Filed:	05/22/97
Staff:	SM-SC
Staff Report:	10/16/98
Hearing Date:	11/3-6/98
Commission Action:	
Substantial Issue	07/9/97
Continued	01/16/98
Continued	06/08/98

STAFF REPORT: REGULAR CALENDAR
COASTAL DEVELOPMENT PERMIT

APPLICATION NUMBER: **A-3-SLO-97-40**

APPLICANT: **COUNTY OF SAN LUIS OBISPO, ENGINEERING DEPARTMENT**

PROJECT DESCRIPTION: Wastewater treatment system, including a treatment plant providing tertiary levels of treatment, gravity dry wells for treated effluent disposal, and a collection system consisting of pump/lift stations, force main and gravity main pipelines. The project also includes sensitive habitat acquisition, preservation, and restoration to mitigate for unavoidable biological impacts.

PROJECT LOCATION: San Luis Obispo County Service Area 9, which includes the communities of Baywood, Los Osos, and Cuesta-by-the-Sea, within the Estero Planning Area of the South Bay Urban Area of San Luis Obispo County. The treatment plant will be located at the southeast corner of the South Bay Boulevard and Pismo Street intersection (the Pismo site), and the gravity dry wells for the disposal of treated effluent will be located south of Highland Drive, between the extensions of Broderson Drive and Doris Drive (the Broderson site).

LOCAL APPROVALS: San Luis Obispo County Development Plan/Coastal Development Permit D950245D

FILE DOCUMENTS: Attached as Exhibit 1

PROCEDURAL NOTE

On July 9, 1997, the Coastal Commission determined that an appeal of the Coastal Development Permit approved by the County of San Luis Obispo for the subject project raised a substantial issue with respect to project's conformance with the County's certified Local Coastal Program. As set forth by Section 13115(b) of the California Code of Regulations, the next step is for the Commission to consider the merits of the project in a De Novo hearing. The De Novo hearing was previously continued by the Commission on January 16, 1998 and on June 8, 1998.

At the De Novo hearing stage, the general procedures for Commission action are typically the same as if the coastal development permit application had been submitted directly to the Commission, except that the standard of review is the certified Local Coastal Program (LCP) rather than Chapter 3 of the Coastal Act (PRC Section 30604(b)). The public access and recreation policies of Chapter 3 of the Coastal Act also apply to projects located between the nearest public road and the sea (Coastal Act Section 30604(c)).

Commission review of this Appeal, though, is more limited than the ordinary appeal because the project is a wastewater treatment plant. Public Resources Code Section 30412 assigns the primary responsibility for decisions relating to water quality to the State Water Resources Control Board and the regional boards. This means that the Commission may not take any action that conflicts with a determination by the State or regional board relating to water quality issues, such as the need to eliminate the use of individual septic systems in the Los Osos area.

Specifically, under Section 30412(c) of the Coastal Act, the Commission's review of a coastal development permit for a "treatment works", shall be determinative only with respect to the following aspects of the development: the siting and visual appearance of the treatment works within the coastal zone; the geographic limits of the service areas within the coastal zone which are to be served by particular treatment works and the timing of the use of capacity of treatment works for those service areas to allow for phasing of development and use of facilities consistent with the Coastal Act; and, development projections which determine the sizing of treatment works for providing services within the coastal zone. The State Water Resources Control Board emphasizes this limited review authority in a letter dated July 31, 1998 (pages 1 – 4 of Exhibit 9).

These limitations are also incorporated into the San Luis Obispo LCP as Policy 9 for Public Works, which requires that the issuance of a permit for a treatment works shall be consistent with PRC 30412 and the certified LCP. Thus, the issue areas that are relevant to the Commission's consideration of this coastal development permit application are limited to the following:

- Siting and design: has the project been sited and designed in a manner that complies with LCP standards, such as those requiring the protection of environmentally sensitive habitats and visual resources, and with Coastal Act access and recreation policies?
- Service area and phasing: is the proposed service area and phasing program consistent with LCP directives regarding the location and timing of new development?
- Capacity: has the project been sized consistent with the amount of development planned for by the LCP?

SUMMARY OF STAFF RECOMMENDATION

The staff recommends that the Commission **approve, with conditions,** the coastal development permit requested by the County of San Luis Obispo for the Los Osos Wastewater Treatment Project. With the recommended conditions, the proposed project conforms with the applicable policies of the San Luis Obispo County certified LCP, and the public access and recreation policies of the Coastal Act, within the limited issue areas subject to the Commission's review pursuant to Section 30412(c) of the Coastal Act.

The recommended conditions of approval are designed to ensure that the siting of the project, and the sizing of the treatment service area, comply with applicable requirements of the LCP, particularly regarding the protection of environmentally sensitive habitat areas. Specifically, the recommended conditions limit the size of the treatment plant to the minimum area possible in order to minimize impacts on biological resources, and require the placement of gravity disposal

wells in the least environmentally damaging location possible. The conditions also require the implementation of specific measures approved by the U.S. Fish and Wildlife Service and the Department of Fish and Game, that effectively mitigate the remaining unavoidable impacts to sensitive habitat areas. In addition, the recommended conditions limit the provision of wastewater treatment service within coastal zone areas to development that is consistent with the San Luis Obispo County certified LCP.

At previous hearings regarding this project, the need to consider the alternative project proposed by the locally based Solution Group was identified as an important issue. As a follow up to the Comparative Analysis completed by Questa Engineering in June, 1998, the Commission staff has facilitated numerous meetings of the interested parties (i.e., the Los Osos Working Group) in order to determine if the Solution Group alternative represents an environmentally preferable, feasible alternative that is more consistent with LCP requirements than the County project. Based on these discussions, it has been concluded that the Solution Group alternative does not offer any significant environmental benefits, in terms of LCP compliance, when compared to the County project. Moreover, based upon the input of the Central Coast Regional Water Quality Control Board (RWQCB), the Solution Group alternative, as currently proposed, does not appear to comply with RWQCB Order 83-13, and may be inferior to the County Project from a water quality standpoint. A detailed comparison of the two projects, including a comparison of environmental impacts, technical feasibility, regulatory compliance, and project costs, is attached to this report as Appendix A. While Appendix A is intended to provide detailed information relative to both projects, it is important to note that this information has limited application to the Commission's review of the County project pursuant to Coastal Act Section 30412 and LCP Policy 9 for Public Works, as discussed above.

TABLE OF CONTENTS

EXHIBITS

1. Substantive File Documents
2. Location Map
3. Project Map and Proposed Service Area
4. South Bay Urban Area Land Use Categories Map
5. South Bay Urban Area Combining Designations Map
6. Land Conservancy Map of Key Habitat/Greenbelt Parcels
7. Wastewater Treatment Facilities Proposed by San Luis Obispo County
8. Wastewater Treatment Facilities Proposed by the Solution Group
9. Recent Correspondence from the State Water Resources Control Board and Associated Attachments
10. Correspondence from the Central Coast Regional Water Quality Control Board
11. Correspondence from the California Department of Health Services
12. Minutes from the January 6, 1998 San Luis Obispo County Board of Supervisor's Hearing
13. Proposal for Mitigation of Impacts to Biological Resources Submitted by Applicant
14. Summary Of Findings from Comparative Review of Alternative Wastewater Plans for Los Osos Completed by Questa Engineering Corporation

---

APPENDICES

Appendix A: Comparison of the Wastewater Treatment Project proposed by San Luis Obispo County and the alternative proposed by the Solution Group

Note: Appendix A is not attached to this staff report. It will be provided in a subsequent mailing.

I. STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

Approval with Conditions.

The Commission hereby **grants** a permit for the proposed development, subject to the conditions below, on the grounds that the development, as conditioned, conforms with the San Luis Obispo County certified Local Coastal Program and the public access and recreation policies of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.

4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.

6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

SITING AND DESIGN CONDITIONS

1. **Approved Facilities:** The approval of this permit is limited to the construction and operation of the wastewater treatment facilities as generally approved by the County of San Luis Obispo on May 6, 1997 and January 6, 1998, described on pages 28 - 31 of this staff report, subject to the following special conditions. Other than normal repair and maintenance as defined in Section 30610(d) of the Coastal Act and Section 13252 of the Commission's regulations, any modifications to any approved project components or any additional components within the coastal zone shall require a separate coastal development permit or an amendment to this permit.

2. **Final Project Plans:** PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the permittee shall submit, for Executive Director review and approval or determination that an amendment is required, final plans for the treatment plant, treated wastewater disposal facilities, and collection system. In addition to complying with the specific requirements of parts a, b, c, and d of this condition, said plans shall comply with all Special Conditions of this permit. This necessitates that, among other conditional requirements, the final design of all project facilities comply with Special Condition 8 regarding hazards considerations, Special Condition 10 regarding design elements, and Special Condition 11 regarding access and recreation facilities.

Furthermore, in addition to the specific information that is required to accompany the submittal of final plans identified by parts a, b, c, and d of this condition, the submission of final project plans shall also be accompanied by: construction operation plans that minimizes the disturbance of sensitive habitats in accordance with Special Condition 4e; landscaping plans that meet the requirements of Special Conditions 3 and 4; grading and drainage plans that meet the requirements of Special Condition 7; and an archaeological report that meet the requirements of Special Condition 9.

a. Final Plans for Stage I of the Treatment Plant: PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall submit final plans for Stage I of the treatment plant for Executive Director review and approval or determination that an amendment is required. The submittal of Final Plans shall be accompanied by written evidence that the Regional Water Quality Control Board has approved these plans, or that no such approval is required.

Final plans for Stage I of the treatment plant shall include an increase in emergency storage capacity for 1.5 days to 3 days, or to the extent determined to be adequate by the Regional Water Quality Board. Any additional site coverage that results from the construction of storage facilities shall be accounted for in the final Biological Mitigation Plan required by Special Condition 3, below. Other than an increase in emergency storage capacity, final plans for the treatment plant shall reduce site coverage to the greatest degree feasible. This shall include: eliminating those facilities at the southern portion of plant associated with the Stage II expansion (additional clarifier and equalization basin); relocating the chainlink fence along the southern boundary of the treatment plant as close as possible to the clarifiers; and, any other change that would allow for a more compact facility. The remainder of the treatment plant site, outside of the footprint of the treatment plant facilities, shall be restored and preserved as coastal scrub habitat according to the specific criteria and requirements of Special Conditions 3 and 4, below.

b. Final Plans for Stage II of the Treatment Plant: PRIOR TO COMMENCEMENT OF CONSTRUCTION OR INSTALLATION OF ANY FACILITIES ASSOCIATED WITH STAGE II OF THE TREATMENT PLANT, the permittee shall submit for Coastal Commission review and approval, or determination that an amendment is required, final plans for Stage II of the treatment plant, which minimize site coverage to the greatest extent feasible and conform with the requirements of Special Condition 17 regarding capacity limitations. Any new development associated with the Stage II expansion of the treatment plant, other than the installation of the additional clarifier, equalization basin, and filters shown on the plans dated July 25, 1997 by Metcalf & Eddy, Inc., shall require an amendment to this permit or separate coastal development permit approval.

c. Final Plans for Treated Wastewater Disposal Facilities: PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall submit final plans for the treated wastewater disposal facilities, for Executive Director review and approval or determination that an amendment is required. These plans shall minimize the amount of land area required for the disposal wells, locate the well field outside of sensitive habitat areas to the greatest degree feasible, and provide for the preservation and restoration of native habitats on the remainder of the site that will not be impacted by disposal facilities according to the specific criteria identified in Special Conditions 3 and 4, below. Submission of final plans for the disposal wells shall be accompanied by: a geotechnical report identifying the minimum setback distance required between the wells and the residences along Highland Avenue; and, written evidence that the use of gravity dry wells has been determined to be acceptable to the State Water Resources Control Board, the Regional Water Quality Control Board, and the State Department of Health.

d. Final Plans for the Collection System and On-Site Wastewater Management Program: PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall submit final plans for the Collection System and On-Site Wastewater Program for Executive Director review and approval or determination that an amendment is required. These plans shall be accompanied by written evidence that the Regional Water Quality Control Board has approved them, or that no such approval is required.

3. **Biological Mitigation:** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for Executive Director review and approval, two copies of a final biological mitigation plan that: incorporates the specific biological mitigation measures described in Special Condition 4, and in the mitigation proposal submitted by the County entitled "Proposal for Mitigation of Impacts to Endangered Species Habitat from the Construction of the Los Osos Sewer and Resulting Future Residential and Commercial Development" (Exhibit 13); provides for the preservation and restoration of native habitats on all portions of the treatment plant and disposal sites that are outside of the footprint of approved project facilities; and includes site specific landscape plans necessary to carry out these biological mitigation measures.

The final biological mitigation plan shall also contain monitoring and maintenance provisions to ensure the long-term success of the mitigation measures, and to identify any impacts to wetland habitats that may result from changes in subsurface groundwater flows caused by the project. This shall include specific monitoring plans containing performance standards developed in coordination with the Department of Fish and Game and U.S. Fish and Wildlife Service, that shall be conducted over a five year period commencing when treatment service begins, with a minimum monitoring frequency of one inspection every four months.

Submittal of the biological mitigation plan shall be accompanied by written evidence that the plan has been reviewed and approved by the California Department of Fish and Game and the U.S. Fish and Wildlife Service, or evidence that such approvals are not required. Submittal of the biological mitigation plan shall also be accompanied by either: evidence that the County has secured the mitigation sites that meets the established criteria for mitigation; or, a binding agreement with a qualified agency or organization, which establishes a procedure for the agency or organization to effectively implement the proposed mitigation with the necessary financing from the County. Such an agreement shall be subject to Executive Director review and approval PRIOR TO THE ISSUANCE OF THE PERMIT, and evidence of the acquisition of the proposed mitigation sites shall be provided for Executive Director review and approval PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

AT THE CONCLUSION OF THE FIVE YEAR MAINTENANCE AND MONITORING PERIOD, the permittee shall submit, for Executive Director review and approval, a report which identifies any impact to Baywood Marsh, Pecho Marsh, and/or Sweet Springs Marsh, in terms of habitat value and extent, attributable to the project. The report shall also document the successful implementation and performance of the approved mitigation measures, and identify any failure to achieve the objectives and performance standards of the approved biological mitigation plan. In the instance that any significant disruptions to wetland habitat values are observed, or the requirements of the approved biological mitigation plan are not achieved, the report shall include an extended monitoring and maintenance program, including appropriate corrective actions, which shall be implemented until successful performance of the mitigation measures has been achieved and the biological continuance of wetland habitats has been assured.

4. **Project-Wide, Specific Biological Mitigations:** The following provisions shall be incorporated into the "Final Biological Mitigation Plan" required by Special Condition 3:

a. Mitigation Monitoring and Reporting. Mitigation monitoring shall be accomplished using a coordinated team approach. The team shall consist of the Environmental Coordinator, the Planning Director, and the County Engineer. Mitigation monitoring shall be accomplished in a manner that ensures oversight of all phases of the project, in order to guarantee the implementation and success of all required project mitigation measures. As required by Article 9 of the County of San Luis Obispo Environmental Quality Act Guidelines, mitigation monitoring shall be at the direction of the Environmental Coordinator, who shall take the lead in coordinating the efforts of the County Engineer and the Planning Director to ensure that these efforts are consistent with the terms of the approved Coastal Development Permit.

The County shall contract with an outside environmental monitoring consultant, whose functions will be to:

1) Provide persons with expertise and experience in each of the following disciplines:

    a) Biological Resources
    b) Air Quality
    c) Drainage, Sedimentation and Erosion Control
    d) Cultural Resources
    e) Traffic

2) Depending on the discipline, act as an independent and objective preparer, reviewer, and/or implementor of mitigation plans.

3) Conduct in the field monitoring (including the preparation of required written reports) during and after the construction of the project.

At the discretion of the Environmental Coordinator, the County may contract with certain individuals (e.g., archaeologist, biologist, erosion control specialist) to act as environmental monitoring team members, in lieu of including those disciplines in the contract with the outside environmental monitoring consultant.

b. Disposal of Excess Soils. The permittee shall develop a plan for disposal of any excess excavated soil from the project as a part of final project design. The plan shall include the identification of a site or sites for placement of excess soil if it is not possible to otherwise use the material for fill on the project. The permitee shall consult with the Planning Director, the County Environmental Coordinator, the U.S. Fish and Wildlife Service, and the State Department of Fish and Game prior to final disposal site(s) selection. PRIOR TO PLACEMENT OF ANY EXCESS SOILS, the permittee shall obtain all necessary permits for the deposition of the excess material at the selected site.

c. Agency Consulting/Permitting. The County Engineer shall secure authorization for the disturbance or take of sensitive species from both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), consistent with the following:

1) Authorization for take by USFWS will require USFWS issuance of a Section 10(a)(1)(B) permit. Such a permit requires the development and implementation of a Habitat Conservation Plan (HCP).

2) Authorization for take by CDFG would require a Memorandum of Understanding (MOU) and Management Authorization (MA) pursuant to Section 2050 et seq. of the

California Fish and Game Code. Development of a MOU/MA would be based upon the Section 10 USFWS consultation discussed above.

d. Additional Habitat Restored. Pursuant to the provisions of the Final Biological Mitigation Plan and the requirements of USFWS and CDFG permits, the County Engineer shall identify, acquire and undertake the restoration of land into suitable habitat for the local species of concern identified in the 1997 Final Supplemental EIR.

In addition to the land acquired for project facilities (e.g., the 10 acre treatment plant site and the 80 acre disposal site), the permittee shall acquire, protect, and restore a minimum of 40 acres of land which contains the following qualities:

1) The land shall be a parcel or group of large parcels that are contiguous with other open space lands.

2) The land shall be proposed for protection by the USFWS Recovery Plan for the Morro shoulderband snail, and/or targeted for acquisition by the San Luis Obispo Land Conservancy as part of a local effort to establish a greenbelt around Los Osos.

3) The land shall be in good condition relative to native habitats, but otherwise planned for development that could diminish the value of the existing habitat.

4) The land should be suited towards the protection and restoration of native habitat types that will be disturbed by the project. This means that the soils have not been removed or fill placed on the site that is unsuitable for the native plantings (other than small amounts), and that the land is free of structures or debris, or capable of being cleared of any structures. The land shall have primarily aeolian sand deposits; be in a stabilized condition (not mobile); have an open canopy; and be of the appropriate aspect and other meterological conditions.

5) The land should be held by the County or appropriate conservation organization in perpetuity with deeded guarantees of non-development or transfer (unless to another like organization). The protection of the land may allow for some passive public activities, such as hiking, scientific investigation, and low-impact educational activities, which do not require structural development.

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which provides that no development, as defined in Section 30106 of the Coastal Act, shall occur in the area shown on Exhibit 1 except habitat restoration, minimal landscaping, trail and signing improvements required to accommodate the low intensity uses described in part 5) of this condition. The document shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

e. Restoration. After securing the additional land in accordance with Special Condition 4d, and after approval of the “Final Biological Mitigation Plan” required by Special Condition 3, the County shall restore the land so that it functions as suitable habitat for may of the local species of plants and wildlife whose existence is endangered or of concern. Restoration of the land should include the following:

1) Removal of invasive exotic plant species. This may mean removal of all plants by grading, or a program of hand labor, depending upon the condition of the land. If the amount of invasives is relatively small, the work should be performed by hand so as to leave as much of the existing native vegetation intact as possible.

2) Removal of structures or debris.

3) Regrading of any unnatural mounds, holes or berms previously created on the site.

4) A planting program of a mixture of indigenous plant species that serve to restore the site and serve multiple species' needs, especially the Morro Blue Butterfly, Black Legless Lizard, and potential future re-introduction of the Morro Bay Kangaroo Rat. This will include Dune Lupine for the Morro Blue Butterfly.

5) An ongoing monitoring and maintenance program that meets the requirements of Special Conditions 3 and 4a. Ideally this would be established as part of the Morro Bay Estuary Program and/or in conjunction with Cal Poly (especially the Biology and Forestry and Natural Resources Departments). As required by Special Condition 3, the final planting program and accompanying monitoring and management measures, shall be developed in consultation with the CDFG and USFWS.

f. Minimize Disturbance of Coastal Scrub, Chaparral, Coast Live Oak Woodland, and Windrow Habitats During All Elements of Project Construction. To the greatest extent feasible, the amount of disturbance of land beyond the actual area of development required for the project shall be minimized. This shall be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend. The submission of final project plans required by Special Condition 2 shall be accompanied by Constructions Operations Plans that provides for:

1) Clearly identifying and marking the perimeter of all construction zones with highly visible temporary fencing prior to and during construction. This shall include the placement of highly visible temporary fencing around the perimeters of the driplines of Coast live oak and windrow areas near construction zones. During project construction, avoid all soil disturbance, companion, and grading activities within and adjacent to such dripline areas.

2) Restricting the use of all heavy equipment, vehicles, and materials storage to areas located inside of the identified construction zones throughout the duration of construction.

3) Clearly identifying and marking the proposed access route to all construction zones, and limiting all construction traffic to areas located within the identified access route.

g. Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of All Construction Zones. PRIOR TO AND DURING CONSTRUCTION, the County Engineer shall implement the following measures to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of all construction zones.

1) Retain a qualified botanist approved by the Environmental Coordinator to conduct focused surveys for special-status plant species during the appropriate flowering

periods for the various species that are known to occur or have potential to occur within construction zones, based on the presence of suitable habitat.

2) Clearly map and identify each individual or groups of special-status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the treatment site and in the northern portion of the disposal site should be marked with highly visible flagging and fencing and completely avoided.

3) Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and fencing in accordance with this condition.

h. Transplant Individual Special-Status Plants Located Within All Construction Zones. DURING THE IMPLEMENTATION OF SPECIAL CONDITION 4g, the botanist shall identify all special-status plants and animals that occur within project construction zones. If the biologist determines that avoiding disturbance of the identified special status plant(s) is not feasible, they shall be transplanted to the nearest suitable habitat area. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined by a qualified botanist to be a viable option for some identified special-status plants, implement the following measures under the supervision of the botanist:

1) Avoid disturbance of the root system of each plant during transplanting.

2) A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.

3) As specified by the botanist and required by the Environmental Coordinator, closely monitor the success of each transplanted species.

i. Conduct Pre-Construction Surveys For Morro Bay Kangaroo Rat at the Disposal Wells' Site. IMMEDIATELY PRIOR TO CONSTRUCTION, a qualified biologist shall conduct surveys for Morro Bay Kangaroo Rat within the vicinity of the proposed rapid infiltration pond site. Prior to being undertaken, survey methods shall be reviewed and approved by the U.S. Fish and Wildlife Service and the California Department of Fish and Game. If upon completion of the survey, and review of survey results by the U.S. Fish and Wildlife Service and the California Department of Fish and Game, it is determined that the Morro Bay Kangaroo Rat is or may be present on the disposal site, the permittee shall consult with the U.S. Fish and Wildlife Service and the California Department of Fish and Game to determine what protective measures shall be implemented prior to construction.

j. Restoration of Undeveloped Portions of the Treatment Plant and Disposal Site. AT THE CONCLUSION OF CONSTRUCTION OF THE APPROVED TREATMENT PLANT AND TREATED WASTEWATER DISPOSAL FACILITY, the additional land around the treatment plant site and disposal facility (that beyond the area disturbed) shall be protected and enhanced in its ability to provide habitat for the native species of plants and wildlife that occur or may occur in the area, in a manner consistent with the approved Final Biological Mitigation Plan and USFWS and CDFG permits. Upon the completion of construction, the permittee shall direct the

immediate revegetation of all disturbed areas[1] located around the perimeter of the treatment facility, and all areas outside of the footprint of disposal facilities, with appropriate indigenous native vegetation approved in the Final Biological Mitigation Plan. All plantings shall be grown from native parent stock collected on-site, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation shall be monitored by a qualified botanist in accordance with the requirements of Special Condition 3 (i.e., for a period of not less than five years or until the new vegetation has been successfully established, whichever is greater). Only native vegetation for landscaping in areas located inside of the treatment plant facility shall be used, and all exotics that escape cultivation should be removed on a regular basis.

k. Control Introduction of Invasive Exotic Plants. The County Engineer shall implement the following measures to control the introduction of invasive exotic plants on the treatment plant site, the treated wastewater disposal site, and the additional land acquired for biological mitigation purposes:

1) Use only clean fill material (free of weed seeds) within construction zones.

2) Thoroughly clean all construction equipment prior to being moved onto and used at the construction sites.

3) Prohibit planting or seeding of disturbed areas with non-native plant species.

4) Control the establishment of invasive exotic weeds in all disturbed areas.

l. Replace Suitable Morro Shoulderband Dune Snail Habitat. AT THE CONCLUSION OF PROJECT CONSTRUCTION, and in a time frame and manner consistent with the approved Final Biological Mitigation Plan and USFWS and CDFG permits, the permittee shall protect and restore an area of Coastal Scrub habitat dominated by Heather Goldenbush that is, at a minimum, four times greater in size than the area of suitable Morro shoulderband dune snail habitat that will be disturbed by the project.

m. Replace Suitable Morro Blue Butterfly Habitat. AT THE CONCLUSION OF PROJECT CONSTRUCTION, and in a time frame and manner consistent with the approved Final Biological Mitigation Plan and USFWS and CDFG permits, the permittee shall protect and restore an area of Coastal Scrub dominated by Dune Lupine that is, at a minimum, four times greater in size than the area of suitable Morro blue butterfly habitat that will be disturbed by the project. To be successful, replacement habitat shall be located adjacent to or within 1,000 feet of occupied habitat. It may be possible to use the same property for this and the prior mitigation measure provided the habitat meets the USFWS and CDFG standards.

n. Replace Suitable Morro Bay Kangaroo Rat Habitat at the Disposal Wells Site. AT THE CONCLUSION OF PROJECT CONSTRUCTION, and in a time frame and manner consistent with the approved Final Biological Mitigation Plan and USFWS and CDFG permits, the permittee shall protect and restore an area of suitable Morro Bay kangaroo rat habitat similar to those existing within all project construction areas prior to project implementation that is, at a minimum, four times greater in size than the area of suitable Kangaroo rat habitat that will be disturbed by the project. The substrate, topography, and plant species composition of the

[1] Disturbed areas include any area that has been affected by construction activities, as well as any area where native habitat values have been diminished by the presence of non-native vegetation, off-road vehicle use, human trampling, or other ocurence.

replacement habitat should be similar to those habitats that currently exist at the project site and areas that are known to provide suitable habitat for Morro Bay Kangaroo Rat, such as in portion of the Essential Habitat area. It may be possible to use the same property for this and the prior mitigation measure provided the habitat meets the USFWS and CDFG standards.

5. **Lighting of the Wastewater Disposal Site:** On-site lighting shall be limited to emergency use only and any such lighting shall meet the requirements of section 23.04.320 of the CZLUO.

6. **Lift Stations:** Specific Biological Mitigations.

a. Lift station number 1. AS PART OF PROJECT FINAL DESIGN, the County Engineer shall ensure that all components of the lift station, including the construction buffers and fences will be a minimum of 50 feet from the upland edge of the riparian zone. The final design plans shall be reviewed and approved by the Environmental Coordinator before inclusion in the submittal of Final Project Plans for the Collection System required by Special Condition 2d.

b. Lift station number 7. AS PART OF PROJECT FINAL DESIGN, the County Engineer shall ensure that all components of the lift station, including the construction buffers and fences will be outside the driplines of adjacent oak trees. The final design plans shall be reviewed and approved by the Environmental Coordinator before inclusion in the submittal of Final Project Plans for the Collection System required by Special Condition 2d.

7. **Grading, Drainage and Erosion Control Plans and Mitigation:** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicant shall submit a program for grading, drainage and erosion control for the Executive Director's review and approval. The program shall include, but need not be limited to, the following measures:

a. Grading and Drainage Plans. A qualified soils engineer shall prepare final grading and drainage plans designed to minimize erosion, sedimentation, and flooding potential during and after construction, in a manner consistent with Sections 23.05.034-036 of the Coastal Zone Land Use Ordinance, for review and approval by the Planning Director, prior to inclusion of the program submitted to the Executive Director as required by Special Condition 7.

b. DURING PROJECT CONSTRUCTION, all grading activities shall be consistent with the approved grading and drainage plans, and consistent with the requirements of Sections 23.05.034-036 of the Coastal Zone Land Use Ordinance.

c. NPDES Construction Activity Storm Water Permit. DURING PROJECT CONSTRUCTION, appropriate Best Management Practices, as established in the project's NPDES Construction Storm Water Permit, shall be employed. Such measures may include, but are not limited to, temporary sand bagging, construction of berms, installation of geofabric, and revegetation of areas by hydroseeding and mulching. The NPDES permit shall apply to all proposed facilities. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineer and the RWCQB and included as part of the grading, drainage and erosion control program.

d. Erosion and Sedimentation Control Plan. The County Engineer shall develop a long-term Erosion Control Plan. The plan shall include the treatment plant site, the pump station and force main locations, the treated wastewater disposal site, and within the vicinity of any sewer lines that will not be installed within an existing roadway. The Erosion Control Plan shall identify erosion control practices to be utilized for typical facility design scenarios. These may include recompaction of soils, revegetation of disturbed areas, utilization of soil binding, or other

methods for reducing long-term erosion. The Plan shall be reviewed and approved by the Planning Director in consultation with the Natural Resources Conservation Service, and shall be included as part of the grading, drainage and erosion control program, as well as within contractor bid and contract documents.

e. RWQCB Authorization. DURING PROJECT CONSTRUCTION, any discharges associated with dewatering activities shall be authorized by the Regional Water Quality Control Board through issuance of Waste Discharge requirements and individual permit, or under a general NPDES permit for construction activity.

f. Dust Control Measures. DURING PROJECT CONSTRUCTION, dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:

1) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be used to prevent dust from leaving the site and to create a crust after each day's activities cease.

2) During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind speed exceeds 15 mph.

3) Stockpiled earth material shall be sprayed as needed to minimize dust generation.

4) During construction, the amount of disturbed area shall be minimized, and on-site vehicle speeds should be reduced to 15 mph or less.

5) Exposed ground areas that are planned to be reworked at dates more than one month after initial grading should be sown with fast germinating native grass seed and watered until vegetation is established.

6) After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will not occur.

7) Grading and scraping operations shall be suspended when wind speeds exceed 20 mph (one hour average).

8) All new roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

g. Drainage Control and Sedimentation Plan. A Drainage Control and Sedimentation Plan shall be developed for the treatment plant site and the treated wastewater disposal site, and shall include infrastructure to adequately control and convey flows generated by impervious surface areas on-site. The Plan shall be reviewed and approval by the Planning Director and County Engineer and included as part of the grading, drainage and erosion control program.

h. Non-Point Source Pollution Control. The Drainage Control and Sedimentation Plan shall take into account non-point source pollution associated with proposed facilities, and shall

include, to the extent feasible, design measures to control the quality of storm runoff generated on-site. These measures may include, but are not limited to, oil and grease traps, sediment traps, and bar screens. Additionally, sludge storage and loading areas at the treatment plant site should be provided with containment such that stockpiled materials are not subject to entrainment and discharge off-site during rains.

8. **Hazards.** Measures required to be implemented as part of the project, in order to avoid and mitigate potential hazards, include:

a. Emergency Storage. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee, in consultation with the Regional Water Quality Control Board, shall prepare a plan for the emergency storage of treated effluent in order to respond to potential seismic or other failure of the effluent force mains. The plan shall be submitted to the Executive Director for review and approval. Implementation of the plan may require an amendment to this permit if it involves new, additional, or different development, beyond that which has been specifically authorized by this permit.

b. Geotechnical Investigation. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, a final geotechnical investigation shall be completed by a qualified engineer. This geotechnical investigation shall include analysis of proposed treatment plant, pump station, and force main facilities, as approved by this permit. The geotechnical investigation shall be submitted for the Executive Director's review and approval and shall address the following issues:

1) Design of facility foundations such that potential impact associated with on-site fault rupture would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

2) The potential for liquefaction impacts at the Pismo Street site. The investigation should determine on-site ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. The report should take into account existing ground water conditions, as well as increased ground water levels associated with project implementation. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles should be identified as necessary to reduce potential impacts to a less than significant level.

3) The potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompation, should be identified as necessary to reduce potential impacts to a less than significant level.

After approval by the Executive Director, the County Engineer shall review the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures PRIOR TO THE SUBMITTAL OF FINAL PLANS REQUIRED BY SPECIAL CONDITION 2.

c. Pump Station #2 Fuel Storage. Bulk fuel storage at pump station #2 shall be placed underground, or shall be provided by portable fuel tank(s). Portable fuel tanks, if used, shall be moved to the site only during actual emergency situations and exercises, and shall be removed within 24 hours after the conclusion of the emergency power need.

d. Seismic Precautions. DURING PROJECT CONSTRUCTION, a qualified geologist shall observe the trenching for the effluent force main in the vicinity of strand "B" of the Los Osos fault to verify that the rapid repair facilities are properly located, and shall accurately map and appropriately record the location of the fault. Such information shall also be kept on file at the County Engineering Department and made available to the public for review.

e. Safe Trench Crossings. DURING PROJECT CONSTRUCTION, safe, temporary pedestrian crossing of all excavations shall be provided for school children and other pedestrians as necessary. All excavations shall be made safe for pedestrians when work is not being conducted in the immediate area.

f. Ground Water Monitoring Program. AT THE TIME OF PROJECT IMPLEMENTATION, a Ground Water Monitoring Program shall be initiated to monitor and assess ground water conditions as disposal wells are brought on-line and used over the long-term. This program shall include sufficient data recovery to determine the areal extent of ground water infiltration and its affect on ground water levels within the Los Osos area. The intent of this program shall be the maintenance of ground water levels to provide adequate effluent disposal, improvement of long-term ground water quality, maintenance of long-term basin yield, and avoidance of potential secondary impacts associated with high ground water levels, particularly within low-lying areas and along the bay fringe. These include potential secondary impacts to salt marsh habitat identified in Section 5.3 of the 1997 Final Supplemental EIR. The Ground Water Monitoring Program shall be developed by the Consulting Engineer, and shall be subject to review and approval by the County Engineer and the Regional Water Quality Control Board and the Executive Director PRIOR TO COMMENCEMENT OF CONSTRUCTION.

g. Ground Water Monitoring. POST PROJECT IMPLEMENTATION monitoring of ground water levels shall continue for a minimum 2-year period following implementation of Phase I to ensure that basin response is consistent with the results of ground water modeling conducted for the proposed project. In the event that ground water levels exceed modeled parameters, and or interest with soils zones identified as potentially liquefiable, discharge parameters shall be altered, in consultation with the Regional Water Quality Control Board, to ensure that ground water levels do not increase the potential for liquefaction within the Los Osos Area.

h. Chemical Deliveries. FOR THE LIFE OF THE PROPOSED PROJECT, chemical deliveries shall be routed to avoid sensitive receptors to the extent feasible.

i. Hazardous Materials Management Plan. PRIOR TO OPERATION OF THE PROJECT, the County Engineer shall submit a Hazardous Materials Management Plan, to the County of San Luis Obispo Health Department, and the Executive Director, for review and approval. The plans shall identify hazardous materials utilized on-site and their characteristics; storage, handling and training procedures; and spill contingency procedures. Additionally, the plan should address diesel fuel storage at the pump station sites.

j. Emergency Response Plan. PRIOR TO OPERATION OF THE PROJECT, an Emergency Response Plan shall be developed for the proposed wastewater treatment plant and pump stations in coordination with the South Bay Fire Department. The plan shall be submitted for the Executive Director's review and approval and shall address the following topics:

1) Hazardous materials handling, storage and application.

2) Hazardous material spill response.

3) Emergency release of untreated influent from the collection system or treatment facilities.

4) Emergency failure of treatment facilities, resulting in a release of untreated or partially treated effluent.

5) Personnel training.

6) Community notification.

7) Impacts on nearby environmentally sensitive habitats and on critical community facilities such as schools, public gathering areas, health care facilities, high occupancy structures, etc.

k. UBC Seismic Zone 4 Design Requirements AS A PART OF PROJECT FINAL DESIGN, proposed facilities shall comply with UBC Seismic Zone 4 regulations, which provide for design of structures to withstand the maximum credible earthquake (M7.0) within the project

9. **Revised Archaeological Mitigation Plan**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a revised mitigation plan for the review and approval of the Executive Director. The plan shall be prepared by a qualified archaeologist and shall include the following elements:

a. Archaeological survey of all areas that will be affected by construction of the project. This investigation shall include an archival records search at the SCCAIC housed at the University of California at Santa Barbara. If the records search determines that the site has not been subject to previous field reconnaissance or that the previous reconnaissance is unacceptable by current professional standards, then the site must be surveyed by a qualified archaeologist. The results of the survey shall be mapped and described in the text of the report.

b. Specific recommendations: The revised mitigation plan shall include detailed, specific recommendations designed to protect identified resources. Recommendations may include all standard protocols, including redesign of project components to avoid impacts on archaeological sites.

c. Monitoring and implementation: The plan shall provide for monitoring of all ground disturbing activities on sites identified in the updated survey as particularly sensitive. The monitoring team shall include a qualified archaeologist and a representative of the Chumash.

d. Discovery of resources during construction: The plan shall include recommendations for preserving archaeological resources discovered during the course of construction. These recommendations shall comply with the requirements of Section 22. 05.140 of the San Luis Obispo County Coastal Zone Land Use Ordinance and in addition shall provide for the preparation of a supplemental archaeology report, which describes the resources and mitigation measures needed to provide adequate protection. Any supplemental reports shall be subject to the review and approval of the Executive Director.

10. **Visual Resources.** The applicant shall comply with the following conditions to avoid adverse impacts on visual resources of the Los Osos area:

a. Landscaping Plan. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, submit a landscaping plan in conformance with section 23.04.186 that provides native, drought tolerant, vegetative screening of the treatment plant (particularly for views from South Bay Boulevard and the adjacent school facility for the Pismo Site). Vegetative screening need not create a complete visual block, but provide a softening of the overall project design. The landscaping plan shall be reviewed and approved by the Planning Director and Executive Director in consultation with Los Osos Citizen's Advisory Committee and CSA-9.

b. Lighting Plan PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, submit a lighting plan in conformance with section 23.04.320 that includes specific elements designed to reduce glare and the spillage of light from the treatment plant site At a minimum, the plan shall identify shielding measures for all lights to avoid glare and light spill-over onto adjacent properties and roadways. The Lighting Plan shall be reviewed and approved by the Planning Director and the Executive Director prior to the commencement o f grading activities.

c. Treatment Plant Site. AS A PART OF PROJECT FINAL DESIGN, the primary structural elements of the buildings shall be no higher than 35 feet above average natural grade.

d. Pipeline Routes. PRIOR TO THE COMPLETION OF CONSTRUCTION, all pipeline routes in areas of natural vegetation shall be restored using native plants in order to return the corridor to its original appearance. Restoration of pipeline routes shall occur in a manner consistent with the approved Final Biological Mitigation Plan required by Special Condition 2.

e. Good Housekeeping. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, the County Engineer shall prepare a "good-housekeeping plan" for the project, to be reviewed and approved by the Planning Director and Executive Director. The plan shall include such information as designation of onsite locations for materials and equipment storage, schedule for debris removal, and proposed screening mechanisms.

f. Project Design. AS PART OF PROJECT FINAL DESIGN, the project shall include elements (architectural treatments, graded berms, exterior materials, exterior color selection) that help the facility blend into the existing environment and provide as much compatibility with surrounding structures as possible. These elements shall be reviewed by the Planning Director in consultation with the community advisory committee, and incorporated into the final plans submitted for Excutive director review and approval, or determination that an amendment is required, pursuant to Special Condition 2.

g. Revegetation Plan. As part of the final Biological Mitigation Plan required by Special Condition 3, the County Engineer shall submit a Revegetation Plan using native materials for the pump and lift station sites. The plan shall include specific revegetation details (e.g., plant palette, number and size of plants to be used, etc.) for each of the lift and pump station sites. For pump station number 2, the Revegetation Plan shall include vegetative measure to provide screening of the generator. The generators shall also be screened and protected through structural means.

11. **Access and Recreation**.

a. Lift station number 3. AS PART OF PROJECT FINAL DESIGN, the County Engineer shall ensure that all components of the lift station, including fencing are located in such a way as to not preclude future development of a community park/coastal access. The final design plans shall be reviewed and approved by the Planning Director and the Executive Director.

b. AS A PART OF FINAL PLANS FOR THE TREATED WASTEWATER DISPOSAL FACILITIES, provision shall be made for a pedestrian and equestrian trail in conformance with county trail standards. Access for wheeled vehicles are restricted to that need for facility maintenance. Final plans submitted as required by Condition 2c shall identify the trail routes, signage and design. The approved trails shall be constructed and available for public use within ninety days of the completion of Phase I of the Project.

12. **Other Approvals**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall submit, for Executive Director review and approval, evidence of the following authorizations and project approvals, or evidence that no such approvals are required:

a. Regional Water Quality Control Board: NPDES Construction Activity Storm Water Permit: Storm Water Pollution Prevention Plan; and, Waste Discharge Requirements for any dewatering activities.

b. Department of Fish & Game: Memorandum of Understanding and Management Agreement pursuant to Section 2050 et. seq. of the California Fish and Game Code.

c. U.S. Fish and Wildlife Service: Completed Section 7 Consultation and associated mitigation program.

d. Any easement or encroachments permits required to undertake project construction.

If compliance with any of the other approvals required for the project involves revisions to the project description or plans submitted to the Commission, or requires additional plans, such changes shall be submitted PRIOR TO THE COMMENCEMENT OF CONSTRUCTION for Executive Director review and approval or a determination that an amendment is required.

SERVICE AREA AND PHASING CONDITIONS

13. **No Guarantees of Development Approvals.** Approval of this permit, or any method of financing the project utilized by the County (e.g., the established assessment program), does not guarantee Coastal Commission or local government approval of any new or intensified uses within the service area. All new development proposals must be reviewed for consistency with the San Luis Obispo County certified Local Coastal Program (and/or the California Coastal Act, as applicable); such review shall consider, among other issues, the environmental impacts of the new development, including the impacts associated with the installation of lateral connections necessary to tie into the approved collection system. WASTEWATER TREATMENT SERVICE SHALL ONLY BE PROVIDED TO DEVELOPMENTS THAT HAVE OBTAINED THE REQUIRED COASTAL DEVELOPMENT APPROVALS< IN A MANNER CONSISTENT WITH SUCH APPROVALS.

PRIOR TO THE ISSUANCE OF THE PERMIT, the permittee shall submit, for the Executive Director review and approval, a public notice to all property owners of record within the service area that includes a copy of this condition, and an explanation of its effect upon the ability to obtain wastewater treatment service for future development. Said notice shall be mailed to all property owners within the service area, or noticed in three local newspapers and included in public information handouts provided by the County, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

14. **Project Phasing**. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for Executive Director review and approval, the revised

service area map required by Special Condition 1.b., which shall also illustrate the following revision to the proposed project phasing: the three large parcels at the southern end of the service area known as the Morro Palisades shall be served by Phase ll of the project rather than Phase I (please see Exhibit 3).

15. **Service Area**. The approved service area for the wastewater treatment facilities corresponds to the area within the Urban Service Line designated by the San Luis Obispo certified Local Coastal Program (LCP). For the South Bay Urban Area. No service shall be provided to the three areas outside of the Urban Services Line illustrated by Exhibit 3 of this staff report. PRIOR TO THE ISSUANCE OF THE PERMIT, the permittee shall, submit, for Executive Director review and approval, a revised service area map which eliminates all parcels beyond the designated Urban Service Line from the project service area.

Future additions to the wastewater treatment service area within the coastal zone shall require a separate coastal development permit, and must be proceeded or submitted concurrently with an LCP amendment that incorporates the proposed service area expansion within the Urban Service Line designated by the LCP. The permittee shall not cause any property outside of the authorized service are to be assessed for benefits received, nor enter into any agreement to serve any properties outside of the service area, until a coastal development permit or amendment to this permit for an expanded service area has been approved.

PLANT CAPACITY CONDITIONS.

16. **Allocation of Wastewater Treatment Capacities**: Because the approved project has been sized to accommodate buildout within the South Bay Urban Reserve Line allowed by the San Luis Obispo County certified Local Coastal Program, no allocation program has been proposed or established. However, should an allocation program that sets priorities for connections to wastewater treatment services by proposed in the future, such a program must be approved by the Commission either through an amendment to this permit or through incorporating such a program into the Local Coastal Program (LCP) through the LCP amendment process.

17. **Stage II treatment Plant Expansion**: PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OR INSTALLATION OF ANY FACILITIES ASSOCIATED WITH STAGE II OF THE TREATMENT PLANT, the permittee shall submit, for Coastal Commission review and approval, a project status report which documents: the operational effectiveness of Phase I: and, any changes in land use designations or expected development within the project service area (especially within the Morro Palisades properties) that would allow for a reduction in Stage II treatment plant capacities. Any opportunity to reduce the State II capacity of the treatment plan, based upon actual flows or changed land use circumstances documented by the approved project status report, shall be implemented by the permittee, and reflected in the submittal of final plans for Stage II of the treatment plant required by Special Condition 1.a.

18. **Water Conservation Devices**. All existing development within the coastal zone to be connected to the proposed project shall be provided with water conservation kits that contain, at a minimum, tank capacity reducers for all toilets and flow restrictors or aerators for all faucets and showerheads. This kit shall be provided by the County of San Luis Obispo, and verification that this has been accomplished shall be submitted to the Executive Director prior to connection to the project.

CONDITIONS IMPOSED BY LOCAL GOVERNMENT

This action has no affect on conditions imposed by San Luis Obispo County pursuant to their authority to carry out the requirements of the California Environmental Quality Act.

IV. FINDINGS AND DECLARATIONS

FINDING 1: BACKGROUND

A. Project Need:

The proposed wastewater treatment project will serve the communities of Los Osos, Baywood Park, and Cuesta-by-the-Sea. These communities comprise the Los Osos area referred to in this staff report, which is located in the Chorro and Los Osos valleys east of Morro Bay and about ten miles west of the City of San Luis Obispo, within the coastal zone of San Luis Obispo County. The Los Osos area was platted in the late 19th Century, with approximately 5,000 small lots intended for summer homes and retreats; many of these lots are only 25 or 37 feet in width and 125 feet in length. As the resident population increased from approximately 600 in 1950 to the current level of approximately 15,000, so has the number and intensity of septic systems.

The proliferation of individual septic systems in the Los Osos area has raised concerns regarding the protection of the groundwater resources underlying Los Osos, from which the Community currently obtains its water. It has also raised concerns regarding the protection of water quality in the adjacent Morro Bay National Estuary, which supports sensitive wetland habitats and provides important opportunities for coastal recreation. These concerns are related to the lack of adequate separation between septic leach fields and groundwater, and the intensity of individual septic systems within a densely populated area, as described in more detail below.

As described in an August 14, 1998 letter from the State Water Resources Control Board (pages 5 – 7 of Exhibit 9), typically functioning septic systems will separate out solids from raw sewage within a septic tank, and the liquid sewage will flow, without treatment, into the soils surrounding the tank (i.e., the leach field). Because treatment of the liquid sewage is accomplished by the soil, it is necessary to have adequate amounts of soil between the leach field and ground water, and to have adequate room for the dispersal of the pollutants contained in the sewage. These minimum requirements are typically established by Regional Water Quality Control Boards in Basin Plans developed for specific watershed regions.

Primary constituents of concern in sewage are nitrates, which can lead to health problems if certain concentrations are found in drinking water. In addition, high concentrations of nitrates in surface waters can result in alga blooms that deplete oxygen from the water, having an adverse impact on aquatic habitats. Other elements of domestic sewage that can have adverse environmental impacts include bacteria such as fecal coliform, and viruses. These constituents pose health risks to humans both from direct contact with contaminated surface water, as well as from the consumption of contaminated shellfish. A March 10, 1998 memo from the Central Coast Regional Water Quality Control Board discusses that oyster growing operations in Morro Bay have been downgraded due to increasing levels of bacteria found in Morro Bay in recent years. These higher bacteria levels require local growers to close portions of their lease areas year-round, and shut down operations for many days after it rains. The California Department of Health Services, in letters to the Commission dated October 5, 1998 and June 8, 1998 (Exhibit 11), recommends approval of the County project in order to address this issue.

According to a November 17, 1994 status report from the Central Coast Regional Water Quality Control Board (RWQCB), the RWQCB and other health agencies became concerned with the use

of individual disposal systems (i.e., septic systems) in the Los Osos area in 1971. As described in the status report, the basis for this concern was that while depth to groundwater varies in the area, it is shallow enough to flood some leach fields in wet weather. In the Baywood Park area, few of the systems can meet the RWQCB's criteria for separation between the bottom of a leach field and ground water. Furthermore, many of the smaller lots are too small for leach fields, and as a result, utilize deeper seepage pits which may discharge directly to ground water. Concerns regarding the impacts of septic systems on ground water were heightened by the fact that the Los Osos area obtains its water supply from groundwater aquifers.

As a result, an interim Basin Plan adopted by the RWQCB in June, 1971 contained a provision prohibiting septic system discharges in the area after 1974. This was followed up by Resolution 83-13 (pages 8 - 13 of Exhibit 9), adopted by the RWQCB in September 1983, which imposed a discharge prohibition of individual and community sewage disposal systems in the Los Osos area that became effective in November, 1988. Since that time, new construction or major expansion of existing buildings has been effectively prohibited, and the San Luis Obispo County Engineering Department has been in the process of designing, financing, and obtaining regulatory approvals for a community wide wastewater collection, treatment, and disposal system.

The RWQCB's actions described above, and the County's efforts to develop a community wide wastewater treatment system, are intended to protect groundwater resources and the quality of surface waters adjacent to the Los Osos, including those of the Morro Bay National Estuary. In particular, the establishment of a community wide wastewater treatment system is intended to reduce the amount of nitrates and bacteria that enter the local groundwater aquifers and surface water bodies.

Many opponents to the County project have expressed their opinion that a link between the use of individual septic systems and the water quality problems identified by the RWQCB has not been clearly established, and therefore assert that a wastewater treatment plant may not be needed. In response to this contention, it is important to note that the State and regional water quality control boards are the lead agencies for the protection of water quality. This is reflected by part (b) of Coastal Act Section 30412, which states:

> The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate this section. The commission shall not, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Thus, it is beyond the scope of the Commission's review to question the RWQCB's determination that a wastewater treatment system is needed. Nevertheless, the following information regarding the need for a wastewater treatment project has been provided as background information relevant to the Commission's consideration of the County's coastal development permit application.

As summarized by a July 10, 1998 letter from the RWQCB (pages 1 – 3 of Exhibit 10):

> Many of the area's … small lots, being too small for leach fields, utilize seepage pits which discharge directly to ground water without benefit of treatment through the soil, as required by out Basin Plan. During wet weather (and for several months after rains), failing septic systems result in surfacing wastewater in yards and running down street gutters. Ground water monitoring indicates the Los Osos ground water basin is one of the more severely contaminated basins in our region, and that ground water nitrate concentrations have significantly increased as population increased in the Los Osos area. Surface waters in Morro Bay National Estuary are also impacted by surface flow and lateral seepage of inadequately treated wastewater.

There are two ground water aquifers underlying the Los Osos area; an upper and a lower aquifer. In a December, 1995 study by the RWQCB entitled Assessment of Nitrate Contamination in Ground Water Basins of the Central Coast Region Preliminary Working Draft, nitrate contour maps depict significant increases in nitrate concentrations over time in both the upper and lower aquifers. According to a July 10, 1998 letter from the RWQCB, the data used to generate these maps were obtained from 107 monitoring wells with more than 1100 data points. The sources of this data were the EPA STORET database, the USGS National Weather Information Service, the California Department of Health Services, California Department of Water Resources, and small water systems. (It is noted that these maps show that, during the most recent time frame of 1985-1994, nitrate levels in the lower aquifer have not increased, and in some areas have decreased. In its July 10, 1998 letter, the RWQCB states that this may be due to many of the monitoring sites being discontinued after the late 1970s and early 1980s.)

The July 10, 1998 RWQCB letter also states:

> Monitoring data indicates much of the shallow groundwater in the most densely developed areas exceeds 45 mg/l, the drinking water standard for nitrate. For this reason, many of the shallow water supply wells have been removed from service and demand shifted to the deeper aquifer. Dependence upon the deeper aquifer exacerbates the surface water problems because the community's water supply, formerly drawn from the upper aquifer, is now drawn from the deeper aquifer and recharged (after use) to the upper aquifer causing ground water levels to rise and flood more septic systems. Increasing surface water impacts including: restriction of portions of shellfish harvesting areas because of rising bacteria levels; waters surrounding the Los Osos area periodically do not meet bacteria standards for water contact recreation (such as swimming, wading, kayaking and small boat sailing); and the public is increasingly exposed to surfacing wastewater.

As evidence that discharges from septic system leach fields and pits are the source of the ground water nitrate problem in Los Osos, the RWQCB letter of July 10, 1998 refers to the Los Osos Wastewater Study Task F – Report on Sanitary Survey and Nitrate Source Study by Metcalf & Eddy. According to this letter, the study concludes that septic systems contribute the majority of nitrogen to ground water. Other evidence cited by the July 10, 1998 RWQCB letter includes violations with Basin Plan requirements for septic systems. The Basin Plan specifies one residence per acre, while in Los Osos, ten residences per acre are common. The Basin Plan also specifies 20 to 50 feet separation in sandy soils between the bottom of the leach trench or pit and groundwater, while in Los Osos, zero separation is not uncommon. Finally, the July 10 letter states:

> Sampling efforts to characterize runoff and seepage from "springs" [surfacing wastewater] has recently included constituents which would be common in domestic wastewater and not found in nature (such as detergents). In this manner fecal coliform bacteria from sewage can be differentiated from other sources. The evidence [that septic systems are the source of the nitrate problem in Los Osos], both scientific and anecdotal, is overwhelming.

In addition to identifying the need for a wastewater treatment system in Los Osos, correspondence received from the State and regional water boards have emphasized the urgency of installing such a system. In an August 14, 1998 letter from the State Water Resources Control Board (pages 5 – 7 of Exhibit 9), it is stated that "There is no dispute the shallow aquifer is already polluted. That polluted groundwater moves downhill to surface water and the deeper aquifer. Unless the source of the sewage is removed, it is inevitable that Morro Bay and the deep drinking water supply will be polluted. Morro Bay is already being contaminated by bacteria and other pollutants discharged from the Baywood/Los Osos septic tanks."

To further illustrate the urgency of the project, this letter references Time Schedule Order 95-90 (pages 14 – 18 of Exhibit 9) issued by the Regional Board to enforce compliance with the septic tank prohibition. This order sets forth a time schedule for the County to complete a wastewater collection and treatment system. Construction was supposed to start December 17, 1997, and Segment I of the system is supposed to be complete on December 28, 1999. The RWQCB can impose monetary liability of $10,000 per day for each day a deadline is missed.

Other factors of urgency include the availability of State funding to finance the project, as well as increasing costs to construct the project. Currently, the State Water Quality Control Board has committed $47 million in funds to the project. The availability of these funds will expire on April 1, 1999, unless construction begins by that date. In addition, as stated in a September 1, 1998 letter from the State Water Resources Control Board, project costs are expected to increase approximately $50,000 per month (based on current construction cost index of one percent per year as reported in *Engineering News and Review*). In light of these factors, this letter urges the Commission to complete the permitting process on this project as soon as possible.

In summary, the State and regional water quality control boards are the State agencies with the responsibility of regulating water quality. In this case, the RWQCB has determined that it is necessary to discontinue the use of individual septic systems in the Los Osos area in order to protect ground water resources and surface water quality. The water quality experts at the RWQCB have based this determination upon many years of monitoring and numerous technical studies. In addition, the RWQCB has established time schedules for compliance with this determination, based upon the urgent necessity of addressing these water quality issues. The Commission, by law, may not take any action that conflicts with such determinations (PRC Section 30412(b)). Thus, the Commission is precluded from pursuing any alternative, such as the Solution Group proposal, that does not provide for the discontinuance of individual septic systems within the prohibition area established by the RWQCB.

B. Project Evolution:

Since the County initiated plans to construct a wastewater treatment facility in 1987, the project has undergone various revisions and updates. There have been 5 environmental reviews conducted pursuant to the California Environmental Quality Act (CEQA) for this project, as well as numerous technical reports and investigations conducted by County Engineering staff and their consultants.

Alternative project designs and locations have been considered throughout the project's history, as discussed in detail on pages 36 - 39 of this report.

An earlier version of the wastewater treatment project currently proposed was approved by the County of San Luis Obispo Board of Supervisors on May 6, 1997, then appealed to the Coastal Commission. In July, 1997, the Commission determined that the appeal raised a substantial issue with respect to the project's conformance with the provisions of the San Luis Obispo County Local Coastal Program (LCP) protecting environmentally sensitive habitat areas.

As originally approved by the County, the project included the use of Rapid Infiltration Ponds for the disposal of treated wastewater. Since that time, the County investigated the use of dry gravity wells rather than ponds for treated effluent disposal. The results of this investigation indicate that, when combined with tertiary levels of treatment, the use of wells is not only technically feasible, but provides opportunities to significantly reduce impacts to sensitive habitat areas by diminishing the footprint of the disposal facilities. As a result, the San Luis Obispo County Board of Supervisors, on January 6, 1998, directed the Engineering Department to modify the disposal method from Rapid Infiltration Ponds to shallow gravity wells. The minutes from this hearing are attached to this report as Exhibit 12.

In addition to the change from disposal ponds to wells, the project has become more specific in terms of mitigating impacts to sensitive habitats. Since the County's May 1997 approval, the County has developed a biological mitigation proposal, attached to this report as Exhibit 13.

C. Events Since the January 1998 Commission Hearing

In November 1997, a citizen's group referred to as the "Solution Group" proposed an alternative to the County's wastewater treatment project. The Commission has received numerous letters in support of this alternative, not only because it is viewed by many people in the community as a more creative and comprehensive solution, but because it is claimed to be significantly less expensive than the project proposed by the County. It has also been represented as a more environmentally sensitive and sustainable system than the County's plan. In order to adequately consider the Solution Group alternative and its potential environmental benefits, the Commission continued the De Novo hearing on the County's project at its meeting of January, 16, 1998, and requested an independent comparative analysis of the two proposals.

Following the January, 1998 hearing, the Commission staff worked closely with the Solution Group, San Luis Obispo County, State Senator Jack O'Connell's office, and other interested parties (i.e., the "working group") in developing a Request for Proposals for such a study, and in selecting an appropriate consultant. As reported to the Commission at the March 1998 meeting, the proposal submitted by Questa Engineering Corporation was selected by a unanimous vote of the working group. The selected proposal included a "fatal flaw" process, under which an unresolveable deficiency with either project would eliminate the need to continue with further investigations. The selected consultant during their review of the two projects identified no fatal flaws.

As reported to the Commission at the March 1998 meeting, a draft report was expected at the end of April 1998. However, Commission staff did not receive the draft until May 19, 1998. Other working group participants received the draft report on May 21 or 22, 1998. Public comments on the draft were submitted by May 29, 1998, and the final report, which included the draft report and a response to the comments received, was hand delivered at the Commission meeting of June 5, 1998. The Solution Group did not have an opportunity to review this final document prior to the June hearing.

In summary, the Comparative analysis found the County project to be superior to the Solution Group project in terms of: water quality protection (e.g., the ability to reduce nitrate levels in groundwater); sensitive habitat protection (the County project has a smaller footprint); and, regulatory compliance (i.e., RWQCB Order 83-13, Waste Discharge Requirements, Standards for Recharge and Recycling Projects). It also identified practical problems with the Solution Group treatment method that called into question the technical feasibility of this alternative. With respect to economic impacts, the comparative analysis identified potential costs that were not accounted for in the Solution Group proposal. While the Comparative Analysis found that the overall project cost of the Solution Group Alternative was less than the cost of the County project, it concluded that the Solution Group alternative poses greater economic risks. A summary of Questa's Comparative Analysis findings is attached to this report as Exhibit 14.

At the June 198 meeting, the Commission continued the De Novo hearing due to procedural and substantive concerns affecting to the Commission's ability to determine the environmentally preferable, feasible alternative. The reduced time frame for responding to the draft analysis, the lack of adequate opportunity for involved parties to review the final document prior to the hearing, and the failure of the consultant to identify the technical problems with the alternative earlier in the process as a "fatal flaw" subject to the review of the working group, were procedural factors resulting in the continuance.

Substantively, the Commission expressed the need to obtain and consider the input of experts more familiar with the treatment method proposed by the Solution Group in order to determine its feasibility. In addition, the need for a more complete analysis of the difference in habitat impacts between the two projects was identified as an important information item necessary to identify the environmentally preferable alternative. Other substantive concerns included the need to have a better understanding of the cost breakdown of the County project, and to further pursue opportunities to avoid impacts to sensitive habitat (i.e., locating the disposal wells in existing roadways). The adequacy of the County's mitigation proposal, particularly with respect to the mitigation of secondary impacts, and whether the mitigation proposal was adequately defined, was another substantive issue raised by the Commission.

Since the June 1998 hearing, the Commission staff has facilitated 4 meetings of the working group in an attempt to resolve these outstanding issues. A primary focus of these meetings was the issue of technical feasibility; whether the Solution Group proposal could effectively address the water quality problems of the Los Osos area. These discussions delved into the assumptions and methodologies involved in the evaluation of nitrate loading, as well as other technical issues including the handling of algae, sludge, and odor issues. Other issues debated at these meetings, relative to both projects, included economic costs and means of financing, environmental impacts and mitigation measures, and consistency with legal requirements (e.g., California Environmental Quality Act). The details of these discussions, and the independent conclusions of the Commission staff regarding how the two projects compare in terms of technical merits, environmental impacts, regulatory compliance, and economic costs, are presented by Appendix A of this report. **Note: Appendix A is not attached to this staff report. It will be provided in a subsequent mailing.**.

As detailed by Appendix A, the Solution Group, in concert with experts in the proposed method of treatment, have provided convincing information that the proposed alternative may be technically feasible. This, however, would be subject to the review and approval of the State and regional water boards. In the correspondence received from these agencies, and in the staff positions communicated at the meetings of the Working Group, it is clear that their position remains that approval of the County project, rather than further pursuit of the Solution Group alternative, is the preferable alternative in terms of water quality protection. A December 22,

1997 letter from the RWQCB (pages 4 – 6 of Exhibit 10) articulates this position. A more recent letter from the State Water Resources Control Board dated August 14, 1998 (pages 5 – 7 of Exhibit 9) states "The County is already behind schedule [in complying with RWQCB Time Schedule Order 95-90]. If the Coastal Commission requires the County to start over with an alternative project, construction and operation will be delayed for years beyond the deadlines of the Order and would likely result in no project at all. A directive to the County to start over with an alternative would conflict with the RWQCB's determination that the continued discharge from septic tanks should be stopped as soon as possible." Other unresolved regulatory and economic impediments to the successful implementation of the Solution Group alternative are identified by Appendix A.

In light of the position of the State and regional water boards, in context with Coastal Act Section 30412, the Commission can not consider the Solution Group proposal an entirely feasible alternative. In addition, it does not appear that the Solution Group Alternative would result in any significant benefits towards the protection of sensitive habitat areas when compared to the County project. The basis for this conclusion is detailed by Appendix A.

FINDING 2: PROJECT LOCATION AND DESCRIPTION

The proposed project is located approximately 2 miles south of the City of Morro Bay, in the Los Osos Valley of western San Luis Obispo County. Morro Bay bounds the Los Osos Valley to the west and northwest, with Park Ridge to the northeast, and the Irish Hills to the south. The project area includes the unincorporated communities of Los Osos, Baywood Park, and Cuesta-by-the-Sea, adjacent to Morro Bay State Park and Montana de Oro State Park. (Please see Exhibit 2 for a location map). Primary land uses in the area include residential, limited commercial, open space and agricultural uses.

The proposed project consists of a wastewater collection system, treatment plant, and treated effluent disposal facility to serve that portion of County Service Area No. 9 within the septic tank prohibition area defined by RWQCB Resolution 83-13. The proposed service area, and the location of the project components, is illustrated in Exhibits 3 and 7. Special Condition 1.b. requires slight modifications to the proposed service area in order to comply with LCP policies limiting the provision of wastewater treatment services to areas within the Urban Service Line for the South Bay planning area. The project also includes mitigation measures to offset unavoidable impacts of the project on biological resources. These project components and their locations are more specifically described below. Special Condition 1 describes the development authorized by this permit and states that any additional development shall require an amendment to this permit or a separate coastal development permit.

A. Collection System:

The proposed wastewater collection system consists of approximately 50 miles of gravity flow sewer pipe, 23,000 linear feet of low-pressure sewer pipe, and 17,000 linear feet of sewer force main. Six below ground "lift stations" will distribute collected wastewater to collection basins, where it will flow by gravity either to another lift station, or to a pump station that will pump wastewater to the treatment plant. The two pump stations required for the project include on-site generators to provide emergency power.

The proposed collection system would be constructed at one time, but individual connections would occur in three phases. Phase 1 encompasses the majority of the septic tank prohibition area established by RWQCB Order 83-13. The Phase I area is generally defined as areas with ground water levels of less than 30 feet below ground surface. Phase 2 hook ups to the collection system

would take place two years after successful operation of the effluent disposal facilities; this area encompasses the remainder of the RWQCB prohibition area. According to the project engineer, the San Luis Obispo County Board of Supervisors required this phasing program in order to ensure that the proposed method of disposing treated effluent functioned effectively. Phase 3 includes areas of development with relatively large lots that currently comply with Regional Water Quality Control Board guidelines for on site septic systems. Sewering of these phase III properties is deferred until a later undefined date (1997 Supplemental EIR, pages 3-3 - 3-5), and is not a part of the project currently before the Commission. Special Condition 14 of this permit requires revisions to the proposed phasing plan to ensure that new development which may be inconsistent with LCP policies protecting sensitive habitat areas is not encouraged by the project, as further discussed on pages 52 - 58 of this report.

B. Wastewater Treatment Plant:

The wastewater treatment plant will be constructed in two stages. The first stage will provide an average dry weather flow (ADWF) of 1.32 million gallons per day (mgd) and a peak wet weather flow (PWWF) of 4.18 mgd. Stage II, representing the currently planned facility buildout, would provide for an ADWF of 2.03 mgd and a PWWF of 5.23 mgd. This ultimate capacity of the treatment plant is based upon the expected buildout of the South Bay Urban Area allowed by the LCP. An analysis of the proposed capacity's consistency with the quantity of development allowed under the certified LCP is provided on pages 52 - 58 of this report.

The treatment plant will be located on an undeveloped 10 acre site at the eastern terminus of Pismo Street, east of South Bay Boulevard, which is bordered by Los Osos Junior High School to the north, undeveloped land to the east, and residential neighborhoods west of South Bay Boulevard. This area is currently designated "Residential Suburban" by the Estero Plan portion of the San Luis Obispo certified LCP, intended to provide for suburban scale residential development on 1 to 5 acre parcels. Other non-residential uses, including wastewater treatment plants, are also allowed within this designation. Areas approximately one quarter of a mile northeast of the proposed treatment plant site are designated as Sensitive Resource areas as a result of the riparian habitat values associated with Los Osos Creek.

Construction of the treatment plant and associated facilities would cover approximately 7 acres of the 10 acre site (see Exhibit 7). The remaining 3 acres are proposed for sensitive habitat preservation and restoration. Special Condition 2.a. limits the site coverage of the treatment plant to the minimum amount necessary in order to minimize impacts on sensitive habitat areas.

As originally proposed, the treatment plant would provide secondary levels of treatment, and eventually be upgraded to tertiary treatment. However, the treatment plant has been upgraded to tertiary treatment in order to allow for the use of gravity wells rather than rapid infiltration ponds for treated wastewater disposal, as discussed below. 1 to 1.5 days of emergency storage would be provided by the treatment plant according to current plans. Special Condition 2a requires final plans for the treatment plant to include at least 3 days of emergency storage, as recommended by Questa Engineering Corporation, or an amount determined to be adequate by the Regional Water Quality Control Board.

The proposed treatment process is the "Modified Ludzack-Ettinger biological process". This is a treatment process designed to remove nitrogen, biochemical oxygen demand (BOD), and suspended solids from incoming wastewater. The treatment scheme includes aerated grit removal followed by suspended growth nitrification/denitrification to effect biological oxidation and nutrient removal from the waste stream. The carbon in the incoming wastewater will be used as a food source for microbial denitrification of the recycled flow.

Following the treatment process, secondary clarifiers will separate solids from the treated effluent, which will then undergo gravity filtration and U.V. disinfection to achieve tertiary levels of treatment. The resulting water is pumped to the effluent disposal facility, and the solids are hauled either to a Class 1 landfill or sold for agricultural purposes in accordance with standards established by the San Luis Obispo County Department of Environmental Health and the U.S. EPA. It is expected that approximately 60 cubic yards per week of sludge will be generated. According to the project engineer, this equates to approximately one truckload per day. Approximately 1.3 million gallons of treated effluent will be pumped to the effluent disposal facility per day.

Under the County project, about 14% of dwelling units within the CSA 9 service area would continue to utilize septic tank treatment and on-site disposal. This would occur in limited circumstances where existing septic and on-site disposal systems have adequate capacity and replacement potential. The County would implement an On-Site Wastewater Management program for such areas, to ensure that these systems function effectively. The details of this program have yet to be developed, and are required to be submitted for Executive Director review and approval by Special Condition 2d.

C. Effluent Disposal/Groundwater Recharge Component:

A primary component of the project is to dispose of treated wastewater in a manner which recharge's the groundwater basin upon which the affected communities are dependent for water supply. As originally approved by the County, disposal of secondary treated wastewater was to take place in Rapid Infiltration Ponds located approximately 500 feet south of Highland Drive, between the extensions of Broderson Drive and Doris Drive (referred to as the "Broderson Site"), south and uphill of a residential area. This disposal area is currently designated for residential single family use, although public facilities are allowed, and was selected because it is in a limited geographic region that has adequate depth to groundwater and a location that facilitates groundwater recharge.

Although the County approved this effluent disposal method in May, 1997, the Board of Supervisors also directed County staff to investigate the feasibility of utilizing wells, rather than percolation ponds, in order to address community concerns regarding the use of the ponds. This evaluation found that the use of wells, when combined with tertiary treatment, is not only technically feasible, but will significantly reduce project impacts on environmentally sensitive habitat areas by diminishing the permanent footprint of the disposal facilities. As a result, the Board of Supervisors, at a public hearing on January 6, 1998 (minutes attached as Exhibit 12), directed the County Engineering Department to modify the disposal method accordingly. The project description has, therefore, been revised to delete the Rapid Infiltration Ponds and to provide for a series of disposal wells (please see Special Condition 2c).

In order to maintain groundwater recharge objectives, the disposal wells will be installed in the same location as the original pond site (i.e., the Broderson site). While the County's wastewater consultant recommended the installation of 46 wells, the County has proposed 60 wells in order to ensure that ther will be adequate disposal capacity during well maintenance and repair. As recommended by the consultant, the wells will have a minimum separation of 150 feet to preventing "mounding". Page 5 of Exhibit 7 provides a draft layout for these wells. Special Condition 2c of this permit requires final plans for the well field to be reviewed and approved by the Executive Director, and specifies that the wells must be placed within the least environmentally sensitive portion of the Broderson site that will not cause adverse impacts to the existing residences along Highland Avenue.

D. Biological Mitigation:

The project includes mitigation measures for impacts to biological resources that will result from the direct impacts associated with facility construction, as well as mitigation for secondary biological impacts attributable to development of sites containing sensitive habitat values that may be facilitated by construction of the project. These measures are described by the County's *Proposal for Mitigation to Biological Resources*, attached to this report as Exhibit 13, and summarized below.

Because the project will result in the loss of habitat for federally endangered species, the County must consult with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act. The proposed mitigation has been designed to comply with this requirement, as well as the requirements of the San Luis Obispo County certified LCP. The County has not, however, initiated Section 7 consultation with the U.S. Fish and Wildlife Service; such efforts have been suspended pending coastal development permit approval. As explained by the project engineer, it is necessary for the County to obtain coastal permit approval prior to selling bonds to finance the project, and this funding is needed to finance the Section 7 consultation.

In summary, the biological mitigation proposed by the County includes:

- preservation and restoration of the 3 acres on the 10 acre treatment plant site that will not be impacted by the project;
- preservation and restoration of the 66 acres of the 80 acre effluent disposal site that will not be impacted by the disposal wells; and,
- acquisition and protection of at least 40 acres of good coastal scrub habitat that contains at least one acre dominated by dune lupine to mitigate for project impacts to the Morro blue butterfly.

The County has yet to identify the specific location(s) of the habitat area(s) to be acquired because of the need to obtain agreement with the USFWS, and the sensitive nature of land negotiations. Instead, the proposal states that the land will be comprised of large parcels, in good habitat condition, contiguous with other open space lands. According to the proposal, all candidate parcels are within areas proposed for protection by the USFWS Recovery Plan for the Morro shoulderband snail, and have been targeted for acquisition by the San Luis Obispo Land Conservancy as part of a local effort to establish a greenbelt around Los Osos.

The consistency of the proposed mitigation measures with the San Luis Obispo County certified LCP is analyzed beginning on page 45 of this report. A number of Special Conditions ensure that the mitigation programs will be successfully implemented (please see Special Conditions 3 and 4).

FINDING 3: LCP CRITERIA FOR THE REVIEW OF TREATMENT WORKS

Chapter 8 of the San Luis Obispo County certified LCP contains policies for public works. Policy 9 of this chapter, entitled "Review of Treatment Works", states:

> For any development that constitutes a treatment works (PRC 30120), issuance of a permit shall be consistent with the certified LCP and PRC 30412 and shall address the following aspects of such development:

a. The siting and visual appearance of treatment works within the coastal zone.

b. The geographic limits of the service area within the coastal zone which is to be served by the treatment works and the timing of the extension of services to allow for phasing of development consistent with the certified LCP.

c. Projected growth rates used to determine the sizing of the treatment works.

PRC 30412, which is incorporated into the above Policy, states:

(a) In addition to Section 13142.5 of the Water Code, this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.

(b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate this section. The commission shall not, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out this division.

(c) Any development within the coastal zone or outside the coastal zone which provides service to any area within the coastal zone that constitutes a treatment work shall be reviewed by the commission and any permit it issues, if any, shall be determinative only with respect to the following aspects of the development:

(1) The siting and visual appearance of treatment works within the coastal zone.

(2) The geographic limits of service areas within the coastal zone which are to be served by particular treatment works and the timing of the use of capacity of treatment works for those service areas to allow for phasing of development and use of facilities consistent with this division.

(3) Development projections which determine the sizing of treatment works for providing service within the coastal zone.

The commission shall make these determinations in accordance with the policies of this division and shall make its final determination on a permit

> application for a treatment work prior to the final approval by the State Water Resources Control Board for the funding of such treatment works. Except as specifically provided in this subdivision, the decisions of the State Water Resources Control Board relative to the construction of treatment works shall be final and binding upon the commission.
>
> (d) The commission shall provide or require reservations of sites for the construction of treatment works and points of discharge within the coastal zone adequate for the protection of coastal resources consistent with the provisions of this division.
>
> (e) Nothing in this section shall require the State Water Resources Control Board to fund or certify for funding, any specific treatment works within the coastal zone or to prohibit the State Water Resources Control Board or any California regional water quality control board from requiring a higher degree of treatment at any existing treatment works.

Taken together, Policy 9 for Public Works and Section 30412 of the Coastal Act, limit the Commission's consideration of a permit for a treatment works project to the following specific issues:

- Siting and design: has the project been sited and designed in a manner that complies with LCP standards, such as those requiring the protection of environmentally sensitive habitats and visual resources, and with Coastal Act access and recreation policies?
- Service area and phasing: is the proposed service area and phasing program consistent with LCP directives regarding the location and timing of new development?
- Capacity: has the project been sized consistent with the amount of development planned for by the LCP?

These issues are analyzed in detail below.

FINDING FOUR: ENVIRONMENTALLY SENSITIVE HABITATS

A. Location:

LCP Requirement: Avoid Locating Public Facilities in Sensitive Area Where Feasible

Section 23.08.288 of the San Luis Obispo County Coastal Zone Land Use Ordinance (CZLUO) specifically regulates Public Utility Facilities. Part d. of the ordinance states:

> **Limitation on use, sensitive environmental areas.** Uses shall not be allowed in sensitive areas such as on prime agricultural soils, Sensitive Resource Areas, Environmentally Sensitive Habitats, or Hazard Areas unless a finding is made by the applicable approval body that there is no other feasible location on or off-site of the property. Applications for Public Utility Facilities in the above sensitive areas shall include a feasibility study, prepared by a qualified environmental professional approved by the Environmental Coordinator. The feasibility study shall include a constraints analysis, and analyze alternative locations.

In this case, "feasibility" not only includes the ability to appropriately treat and dispose of wastewater, but to do so in a manner that will recharge the groundwater basin. Policy 1 for Coastal Watersheds of the Coastal Plan Policies component of the certified LCP requires that the long term integrity of groundwater basins be protected, and Policy 11 from the same LCP section mandates that new development maximize groundwater recharge.

Analysis

The first test of project compliance with LCP Section 23.08.288 is determining whether the project is located in a sensitive area. The LCP defines such areas as follows:

> Sensitive Resource Area: Means those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity, pursuant to Section 23.01.043c(3) of this title. [Section 23.01.043c(3) includes: special marine and land habitat areas, wetlands, lagoons, and estuaries mapped and designated as Environmentally Sensitive Habitats in the Local Coastal Plan; areas possessing significant recreational value, including any "V" (Visitor Serving designation as shown in the Land Use Element and areas in or within 100 feet of any park or recreation area; highly scenic areas which are identified as Sensitive Resource Areas by the Land Use Element; archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer; Special Communities or Small-Scale Neighborhoods which are significant visitor destination areas as defined by Chapter 23.11 of this title; areas that provide existing housing or recreational opportunities for low-and moderate income persons; and, areas where divisions of land could substantially impair or restrict coastal access.]
>
> Environmentally Sensitive Habitats: A type of Sensitive Resource Area where plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development. They include wetlands, coastal streams and riparian vegetation, terrestrial and marine habitats and are mapped as Land Use Element combining designations.

Numerous environmental documents prepared for the project have documented the presence of many sensitive species and habitats at both the proposed treatment plant location and the effluent disposal site, as described in detail below. Thus, the sites definitely contain Environmentally Sensitive Habitat as described by the LCP. Unfortunately, the ESH is not currently mapped in the Land Use Element, which is the anticipated mechanism for implementing resource protection policies by the County's map-based LCP. That is, in the context of the overall San Luis Obispo County LCP, which establishes a "Resource Management System" (RMS) to address changing resource circumstances, the above LCP definitions assume a robust mapping system that would be continually updated to reflect current, on-the-ground conditions. However, in this case, the County's existing SRA maps have not been updated since January 1989, and do not reflect the actual ESH found at the sites at issue. ESH areas have been mapped on the project sites as part of the environmental reviews, but these habitat areas have not been incorporated into the LCP mapping system.

The LCP is silent on what to do in those instances where environmentally sensitive habitats are found at a particular site, as is the case here, but they have not yet been officially mapped. To interpret the LCP policies in way that such environmentally sensitive habitats are not treated as such would be at odds with both the intent of the LCP's ESH protection policies and the clear direction of Coastal Act objectives. It would also be poor public policy and resource planning to suggest that an accurate delineation of all sensitive habitats will be accomplished at only one

specific point in time, due to the many dynamic variables that can affect the type and location of such resources over time. Public policy must be able to account for new information and scientific understanding in the implementation of resource protection policies, such as the information that has been developed by the County regarding the habitat values of the treatment plant and disposal sites. The only rational response in such situations, therefore, is to treat existing environmentally sensitive habitats as such under the LCP, regardless of whether they are currently precisely mapped in the certified Land Use Element. As described below, such an approach is clearly warranted in this case.

The treatment plant site (the Pismo site) supports three primary ecological communities considered sensitive by the California Department of Fish and Game (DFG): Coastal Scrub, Chaparral, and Coast Live Oak Woodland. The coastal scrub community is the most dominant plant community on the site, with Dune Lupine Scrub occupying approximately the central one-third of the site, blending with Heather Goldenbush Coastal Scrub to the South. Live Oak woodland, along with Monterey Cypress and Monterey Pine trees, are located within the east and northeast portion of the site. Morro Manzanita, listed as federally threatened, occupies the eastern edge of the site; other chaparral communities represented by Chamise - Wedgeleaf Ceanothus are located within the southwestern portion of the site. Non-native Veldt Grass forms a grassland within a western portion of the site.

As documented by the 1997 Supplemental EIR for this project, the native plant communities on the treatment plant site provide suitable habitat for numerous special status plant and animal species. Morro Manzanita and Monterey spineflower (federally listed as threatened), as well as Sand Almond and rare non-vascular plants (lichens) have been found on the site, while other special status plant species are expected to occur. The Morro Shoulderband Dune Snail (federally endangered), Black legless lizard (proposed as federally endangered), Monarch Butterfly (habitat considered sensitive by DFG), and Morro Blue Butterfly are also expected to utilize the site.

The 1997 Supplemental EIR for this project also documents that the 80 acre site proposed for effluent disposal (the Broderson site) supports various Chaparral, Coastal Scrub, and Live Oak Woodland habitats. Special status plant and animal species that are expected to occur on the site, include: Blochman Leafy Daisy, Indian Knob Mountainbalm, San Luis Obispo Wallflower, Morro Manzanita, and Sand Almond; and, Morro Bay Kangaroo Rat, Morro Shoulderband Dune Snail, Morro Blue Butterfly, Monarch Butterfly, Black Legless Lizard, and California Spotted Owl (which may use the area for foraging due to the presence of its primary prey, the Dusky-Footed Woodrat). This site is identified as “Critical Habitat” for the endangered Morro Bay Kangaroo Rat by the USFWS. It is also within a “Conservation Planning Area” identified by USFWS’s Draft Recovery Plan for the Morro Shoulderband Snail and Four Plants (Morro Manzanita, Chorro Creek Bog Thistle, Indian Knob Mountainbalm, and Pismo Clarkia) from San Luis Obispo County.

Based on the identified sensitivity, rarity, and value of habitat at both the treatment plant site and two of the three potential disposal sites, the project will be located within both Sensitive Resource Areas and Environmentally Sensitive Habitats, as defined by the San Luis Obispo County LCP.

The next step in evaluating project conformance with LCP Section 23.08.288 is to determine whether alternative locations, on or off site, could feasibly accommodate the project.

B. Alternative Locations for the Treatment Plant:

A February, 1997 Supplemental Environmental Impact Report prepared for the project analyzed three alternative locations for the treatment plant, as well as an alternative to the effluent

disposal sites proposed in 1987. The results of this analysis indicate that the original site for the treatment plant proposed in 1987, known as the Turri Road site, was environmentally superior by a very slight margin. This site was specifically designated to accommodate the wastewater treatment plant in a 1990 amendment to the LCP approved by the Commission, but includes prime agricultural soils, as well as wetlands, and is the furthest distance from the service area. The other potential treatment plant location evaluated by the 1997 Supplemental EIR (referred to as the Cordoniz site) posed greater environmental impacts than either the Turri or Pismo sites.

Due to significant increases in project costs associated with increased pumping distances, the environmental impacts associated with pipeline creek crossings, and the LCP's directive to protect prime agricultural lands, the County selected the currently proposed Pismo site for the treatment plant, rather than the Turri Road site. This selection was made in recognition that the overall environmental impacts of the two sites were generally equivalent; neither provided an opportunity to avoid impacts on sensitive environmental areas. The investigation of alternative sites, as required by Section 23.08.288, has been unable to identify feasible project locations that would avoid impacts to such areas.

Another potential site for wastewater treatment purposes is the treatment site proposed by the Solution Group. This site includes approximately 55 acres, in the middle of the developed portion of Los Osos. In 1992, a residential development known as the Morro Shores was proposed on this site, and an Environmental Impact Report (EIR) was prepared. As part of this environmental review, two botanical surveys were conducted in 1989. According to these surveys, vegetation on this site "is or was coastal dune scrub. This has been much disturbed over the years throughout much of the site." While the disturbed nature of this area is emphasized by the survey, it also recognizes that "[s]ince the coastal scrub communities are fast disappearing along the central California coast, the remaining vegetation has increased in value". The botanical surveys identify four particular portions of the site that support Coastal dune scrub habitat (i.e., lots 7 to 15, lots 97 to 99, the are along the eastern boundary of lot 101, and portions of lot 102 near the western boundary of the existing library). The presence of Coast live oak trees on lots 59, 91, and 97 is also identifies by the botanical surveys. Other sensitive plant species identified on the site by the botanical surveys include Sand almond, and *Eriastrum densifolium*. Neither the botanical reports nor the EIR quantify the acreage of the native habitat present on the site. Some rough estimations are contained in Appendix A of this report, as part of the comparison of environmental impacts between the Solution Group proposal and the County project.

Although no federally listed threatened or endangered plants or animals were identified by the 1992 EIR, it is important to note that the EIR was prepared prior to the listing of the Morro shoulderband snail. Based on the documented presence of such snails in other areas of Los Osos that contain Coastal dune scrub vegetation, it is highly likely that they occur on this site. This is reflected by the Draft Recovery Plan for the Morro shoulderband snail prepared by the U.S. Fish and Wildlife Service (USFWS), which designates the site as an "Other Habitat Area". The Comparative Analysis performed by Questa Engineering also assumed that this area provided potential habitat for the Morro shoulderband snail.

By virtue of the Coastal dune scrub habitat on the treatment site proposed by the Solution Group, which provides potential habitat for the Morro shoulderband snail, as well as the presence of other sensitive plant species such as Coast live oak trees and Sand almond, this site can not be considered an alternative project location that would avoid impacts to Environmentally Sensitive Habitat areas. As detailed by Appendix A, the quality of the habitat on the treatment site proposed by the Solution Group is essentially equivalent to the quality of

the habitat found on the treatment plant site proposed by the County. In addition, Appendix A identifies that the treatment system proposed by the Solution Group requires more land area than the County treatment system, and as a result, has the potential to result in a greater disturbance to sensitive habitat areas.

C. Alternative Locations for the Disposal of Treated Wastewater:

With respect to effluent disposal, the County project evaluated in 1987 proposed to utilize both a discharge along Los Osos Creek during dry weather, as well as Rapid Infiltration Ponds during wet weather. Although the discharge of treated effluent to the creek was considered superior from a groundwater recharge standpoint, there were potentially significant environmental impacts associated with this element of the project (e.g., creek crossings, loss of riparian habitat), the resolution of which were deferred to a later date. The extent of Rapid Infiltration Pond development was not reduced by the inclusion of the creek disposal because during wet weather, it would be necessary to dispose of all of the treated wastewater in the Rapid Infiltration Ponds.

In the 1987 EIR for the project, the Rapid Percolation Ponds were proposed in a generalized location just east of the currently proposed Broderson disposal site, in an area referred to as Site 6 (or the "Morro Palisades"). This area is designated as "essential habitat" for the endangered Morro Bay Kangaroo Rat by the U.S. Fish and Wildlife Recovery Plan for this species. It was selected after four alternative percolation sites, referred to as the Los Osos Creek Valley sites and Cemetery Mesa sites (two potential disposal sites at each), were rejected due to inadequate percolation rates and inappropriate geologic conditions (!987 EIR, p. VII-25).

Additional sites for wet weather disposal facilities considered and rejected by the 1987 EIR included areas along the eastern side of the Los Osos Community and west of Los Osos creek, undeveloped areas in western Los Osos generally north of Los Osos Valley Road, and areas west of Pecho Road and east of the southern end of Morro Bay State Park. These sites were rejected due to high groundwater levels, inappropriate geologic conditions, proximity to Morro Bay, the presence of significant habitat values, and/or other reasons (1987 EIR, p. VII-30 - VII-31). The EIR findings rejecting these disposal sites was reconfirmed in a subsequent alternative investigation performed in 1995, known as the Task G report (pages B1-11).

In subsequent efforts to determine the best specific location for the Rapid Infiltration ponds, the County found that impacts to sensitive habitat areas would be reduced by relocating the ponds west of Site 6 to the Broderson site. The Broderson site is outside of the area identified as essential Kangaroo rat habitat by the U.S. Fish and Wildlife Service. In addition, the County found that the high permeability of the soils at this location, and sufficient depths to groundwater, would allow for the entirety of the effluent to be disposed of at the Broderson site, thereby eliminating additional costs and environmental impacts associated with creek disposal. In addition, groundwater modeling efforts confirmed that the disposal of treated effluent at the Broderson site would effectively recharge groundwater supplies (pages 1 – 2 of Metcalf & Eddy's November 21, 1997 "Draft Evaluation of Effluent Disposal at the Proposed Broderson Recharge Site, Los Osos, California" referencing Metcalf & Eddy's February 26, 1996 report entitled "Hydrogeologic Evaluation of the Proposed Broderson Recharge Site, Los Osos, California").

According to the County Engineering Department, the County also considered locating the ponds within a more disturbed area currently used for equestrian purposes west of the Broderson site. This option was rejected on the basis that groundwater recharge potential

would be significantly reduced. The further west the recharge site is located, the more likely it would be for the discharged effluent to flow towards the Bay, rather than towards the groundwater basin.

As previously noted, the County revised the method of treated effluent from rapid infiltration ponds to dry gravity wells in January 1998. As currently proposed, the wells will be located within the same area where the ponds were to be installed. However, in investigating the feasibility using wells rather than ponds, the option of locating the wells in existing roadway rights-of-way was considered. According to a January 15, 1998 letter from Metcalf & Eddy (wastewater engineering consultants to the County), this alternative was concluded to be "marginally feasible". Downfalls to this alternative identified by this letter included the need to conduct additional groundwater modeling studies, and an increased cost of $1 million due to the need to install additional flow controls. Of particular concern was the unknown separation between the wells and the groundwater surface at this location, which could affect the ability of obtaining approval from the California Department of Health Services. In addition, the wells would be much closer to existing residences, necessitating further analysis of soil conditions and the potential for discharged effluent to mound and surface in this area.

Nonetheless, based on the potential feasibility of this alternative, which would avoid impacts to sensitive habitats at the Broderson site, the Commission staff requested the County to further consider this option. In response, the County provided an updated letter from Metcalf & Eddy that concludes that locating the wells on the Broderson site is "more cost-effective and serves the Community better than the linear alignments along Highland Drive and Mar Vista Drive". This conclusion was based on: the increased risk of the surfacing of treated effluent, and the reduced degree of groundwater recharge associated with locating the wells down gradient of the Broderson site; and, the impact of the well system on local traffic during construction and operation, which may require access to one or more wells on a weekly basis. According to this letter, the grid configuration proposed on the Broderson site "has the greatest assurance of success, best matches the hydraulic modeling work on which our conclusions were based, and provides a balance between habitat disruption and impacts on the residents."

Thus, the option of locating disposal wells in existing roadway rights-of-way is not considered a feasible alternative that would avoid impacts to environmentally sensitive habitat areas.

With respect to other potential locations for effluent disposal, it has been suggested that ongoing groundwater modeling studies being conducted by Woodward Clyde consultants for the Southern California Water Company could result in the identification of other feasible sites. The purpose of this groundwater modeling study is to evaluate, update, and enhance a model of the Los Osos Groundwater Basin developed by the U.S. Geological Service (USGS) in 1988. On September 5, 1997, the most recent product of this effort, a draft report entitled Los Osos Groundwater Model Update and Post Audit Analysis was released. According to this document, the primary objective is to update, and evaluate the groundwater model previously developed by the USGS, and convert data to enhance computer applications for groundwater management needs. Thus, the report will not address the wide range of factors that must be applied to the determination of the most appropriate location for effluent disposal facilities, such as sensitive habitat considerations, site specific soil conditions, and other technical and land use considerations. Given the numerous locations for effluent disposal previously considered by the County, the unique characteristics required for an appropriate disposal site, and the need to come to a timely solution the water quality problems faced by Los Osos, it would be inappropriate to delay action on the project based on this groundwater modeling study.

Other locations for treated wastewater disposal, include Los Osos Creek, or public spaces and farms, where the water could be used for irrigation. Both of these alternatives are included as part of the alternative project proposed by the Solution Group.

As previously discussed, discharging treated wastewater to the upper reaches of Los Osos creek poses environmental impacts which have not been fully identified or resolved, and would not reduce the biological impacts associated with other disposal techniques based upon the seasonal nature of this disposal option. Similarly, the use of treated wastewater for the irrigation of public spaces would not accommodate the need to dispose of treated effluent on a year-round basis. The same constraint applies to the option of disposing treated wastewater on agricultural land, an alternative that was considered and rejected by the 1987 EIR. Thus, none of these options would avoid impacts to environmentally sensitive habitat areas.

Conclusion

As required by CZLUO Section 23.08.288, the applicant has appropriately analyzed the constraints and feasibility of alternative project locations that would avoid sensitive habitat areas. The results of these analyses support a finding that there is no feasible location on or off site of the properties designated for the wastewater treatment and treated wastewater disposal that would reduce impacts to sensitive habitats and still achieve the LCP directive to maximize groundwater recharge. The project is therefore consistent with CZLUO Section 23.08.288.

D. Design:

LCP Requirement: Design Projects to Minimize Impacts on Sensitive Resources

In addition to considering alternative locations that avoid sensitive habitat areas, other policies and ordinances contained in the LCP call for projects to be designed and sited in a manner which avoids or minimizes impacts to sensitive habitat areas. These include the following Coastal Plan Policies for Environmentally Sensitive Habitats:

> Policy 5: Protection of Environmentally Sensitive Habitats. Coastal wetlands are recognized as environmentally sensitive habitat areas. The natural ecological functioning and productivity of wetlands and estuaries shall be protected, preserved, and where feasible, restored.
>
> Policy 27: Protection of Terrestrial Habitats. Designated plant and wildlife habitats are environmentally sensitive habitat areas and emphasis for protection should be placed on the entire ecological community. Only uses dependent upon the resource shall be permitted within the identified sensitive habitat portion of the site.
>
> Development adjacent to environmentally sensitive habitat areas and holdings of the State Department of Parks and Recreation shall be sited and designed to prevent impacts that would significantly degrade such areas and shall be compatible with the continuance of such habitat areas.
>
> Policy 33: Protection of Vegetation. Vegetation which is rare or endangered or serves as cover for endangered wildlife shall be protected against any significant disruption of habitat value. All development shall be designed to disturb the minimum amount possible of wildlife or plant habitat.

Analysis

As previously established, the treatment plant site and the effluent disposal site are environmentally sensitive habitat areas, and are therefore subject to the above policies. The first requirement of Policy 27 is that the proposed use be dependent upon the identified sensitive habitat that will be impacted.

Although the effluent disposal facilities are not dependent upon the specific habitat resources of the Broderson site, they are dependent upon the unique geologic resources within this area. After extensive analysis, the limited geographic region in which the wells are proposed was the only area identified as having the geologic characteristics necessary to effectively accommodate the treated effluent and recharge the groundwater basin, without adversely affecting downslope residences. These unique geologic characteristics, upon which the project is dependent, include high depth to groundwater, adequate percolation rates, and the absence of impermeable layers that would prevent the disposed effluent from traveling vertically. In addition, the acquisition of the site, and the preservation of the 66 acres that will not be impacted by the disposal facilities, will protect the sensitive biological resources dependent upon these habitat areas.

Similarly, the location of the treatment plant is not fully consistent with Policy 27 because this type of facility is not dependent upon the habitat resources found on the proposed site. However, the habitat values at the treatment plant site are diminished by the fact that the site is surrounded by development on three sides, and is therefore a fragmented habitat that has limited value towards the long term survival of the species found on the site. Developing the treatment plant at this location will also avoid greater environmental impacts associated with alternative locations, including pipeline creek crossings, the loss of prime agricultural land, impacts to wetlands, and the disturbance of environmentally sensitive habitats with more significant habitat value.

And as already mentioned, it is also important to recognize that the wastewater treatment project is necessary to avoid significant adverse impacts to important groundwater resources and environmentally sensitive habitat areas within the Morro Bay National Estuary that would result from continued use of septic systems throughout Los Osos.

Finally, Policy 27 must be read in conjunction with Section 23.08.288 of the CZLUO, which does not prohibit the siting of public facilities in Environmentally Sensitive Habitat areas if no other feasible alternatives available. As discussed above, such is the case here. In addition, development on this site has been extensively conditioned to avoid, minimize or mitigate impacts on existing habitat values. As conditioned, the project can be found to be consistent with the sensitive habitat protection provisions of the LCP (please see Special Conditions 3 and 4).

Overall, then, the project is generally consistent with the resource dependent requirements of Policy 27.

The second requirement of Policy 27, and the standard established by Policy 33, is that projects within and adjacent to environmentally sensitive habitat areas be designed to minimize the disruption of habitat values. In the case of the subject project, there may be alternative designs and technologies for wastewater treatment and disposal that could reduce project impacts on sensitive habitat areas, as discussed below.

As previously described, the project has incorporated the use of gravity dry wells rather than Rapid Infiltration Ponds for effluent disposal. This will allow for a significant reduction in the 14 acres of environmentally sensitive habitat that would be permanently lost through the construction of the previously proposed Rapid Infiltration Ponds. Nonetheless, the County

mitigation proposal identifies an impact area of 14 acres at the Broderson site. This appears to be an overly conservative estimation based upon the draft configuration of the well field (page 5 of Exhibit 7), and the County's intention to restore and protect the areas between the wells and access roads and Coastal dune scrub habitat, as further discussed below

A November 1997 report investigating the feasibility of wells estimates that 23 continuously utilized wells would be necessary to accommodate the 1.3 million gallons per day of treated wastewater generated by Phase I of the project. The report therefore recommends the installation of twice this number (46 wells) to address variables in predicted flow rates, maintenance requirements, and other performance contingencies. The report further recommends that the wells be separated by 150 feet based upon observed 70-foot radii of wetted area surrounding the wells observed during infiltration tests. This configuration is illustrated in the draft layout for the wells recently submitted by the County (page 5 of Exhibit 7).

As previously noted, the County project includes the installation of up to 60 wells in order to ensure that there is adequate disposal capacity during wet weather flows. The County engineer has identified that each well would have a maximum footprint of 400 square feet (20 feet by 20 feet). In addition, a 12 foot wide gravel access road along each row of wells, and an access road along the eastern boundary of the site of the same width, would be required for maintenance purposes.

The 1,110 foot wide Broderson site could accommodate 7 wells per row at the recommended separation of 150 feet. 8.6 rows of wells, also separated 150 feet, would be required for 60 wells, resulting in a well field depth of approximately 1,200 feet. Thus, the overall well field area, including the area between the wells, is estimated to consume approximately 1,332,000 square feet, or 31 acres. Taking into consideration the County's intention to protect and restore the areas between the wells and access roads as native Coastal dune scrub habitat, very little of this area will be impacted by the wells and access roads (see calculations below). To ensure this is the case, Special Conditions 2 and 3f require Executive Director review and approval of a construction operations plan that avoids the disruption of all sensitive habitat areas outside of the footprint of the wells and access roads during well field construction.

The 60 wells, with a maximum footprint of 400 square feet each, would consume 24,000 square feet of land area. 8.6 rows of 12 foot wide access corridors that are approximately 1,100 feet long results in an additional disturbance of about 113,530 square feet. The 12 foot wide access road along the eastern boundary of the site, which will extend for a the entire depth of the well field (1,200 feet), plus the 200 foot setback from the residences along Highland Avenue, adds another 16,800 square feet of impact area. Thus, the total footprint of the disposal facilities equates to about 154, 320 square feet (or approximately 3.5 acres) over 10 acres less than the 14 acre footprint previously anticipated for the Rapid Infiltration Ponds.

Impacts to sensitive habitat areas associated with the well field may be further diminished by reducing the 200 foot setback from the residences bordering the southern portion of the site, originally required by Condition 59 of the County's approval. This setback area, intended to provide a buffer between the residences and the ponds, represents the most disturbed portion of the disposal site. Because impacts associated with the above ground storage of treated wastewater (i.e., the potential for an unplanned release of treated effluent and potential odors) would be eliminated through the use of wells, a reduction in this setback may be appropriate. Special Condition 2c therefore requires final plans for the disposal facilities to locate the wells in the least environmentally damaging location by minimizing this setback distance as much as possible. The final setback distance will be determined by a supplemental geotechnical report analyzing the potential hazards associated with the use of wells for effluent disposal, which must be reviewed and approved by the Executive Director.

Therefore, as conditioned, the use of wells on the Broderson site represents the most environmentally preferable, feasible design for the project, consistent with the previously identified LCP policies.

Another wastewater treatment design that has been considered is the system proposed by the citizen based "Solution Group". In summary, this alternative proposes to:

- Replace septic tanks in areas of the community with less than 30 feet to groundwater with Septic Tank Effluent Pump (STEP) systems. STEP systems pump liquids to a treatment facility, and act as a holding tank for solids that would be removed periodically and trucked to the treatment facility. Commercial areas and mobile home parks would also be served by STEP systems.

- Utilize an Advanced Integrated Wastewater Ponding System (AIWPS) to treat wastewater generated from the STEP systems and independently transported septage (solids). Such systems are successfully being utilized in California communities such as St. Helena, Bolinas, and Delhi. The treatment scheme involves Facultative Ponds with fermentation pits for solids digestion, and the recycling of oxygen-rich water from subsequent treatment steps for odor control. After primary treatment, the effluent enters shallow, channelized High-Rate Ponds which are designed to promote rapid algae growth with concomitant generation of oxygen to aid in the further destruction of biodegradable organic matter.

- Retain septic tank treatment and on-site disposal for approximately 44% of the dwelling units in the service area. An On-Site Wastewater Management Zone and a Septic System Maintenance and Management Program would be established to oversee the upgrade and proper maintenance of existing septic tanks.

- And, dispose of treated wastewater by utilizing gravity wells located either within the Highland Avenue right-of-way, or on the Broderson site.

This alternative also proposes to harvest groundwater from low lying areas of the community that experience periodic flooding as a result of high groundwater levels, and utilize this water for both domestic supply and groundwater recharge purposes.

As previously discussed, Section 30412 of the Coastal Act and LCP Policy 9 for Public Works prohibits the Commission from considering the Solution Group proposal as a feasible alternative inasmuch as the alternative as currently proposed is in direct conflict with RWQCB Order 83-13. Nevertheless, an analysis of the environmental impacts associated with this proposal, as compared to the environmental impacts associated with the County project, is provided in Appendix A. The conclusions of this analysis indicate that the Solution Group alternative will not avoid or minimize the impacts to environmentally sensitive habitats associated with the County project. In fact, as detailed by Appendix A, the Solution Group has the potential result in the disturbance of a greater amount of sensitive habitat areas, and jeopardize the implementation of a solution to the water quality problems faced by this region.

In addition to the location and design alternatives previously discussed, additional alternatives have been considered by the County throughout the history of this project, in an effort to both

reduce project costs and minimize impacts on environmentally sensitive habitat areas. These additional alternatives are summarized below.

The no project alternative was not considered acceptable, as it would not resolve the septic system prohibition imposed by the Regional Water Quality Control Board or the water quality degradation attributable to continued use of septic systems in the area. The no project alternative would also forego the opportunity to utilize treated wastewater to recharge the local groundwater supply, and might increase pressure to develop outside of the prohibition zone, which could have an adverse impact on several sensitive plant and animal species (1987 EIR, p. VII-1).

The 1987 EIR also analyzed a reduced capacity alternative. The EIR concluded that such an alternative may reduce, but not avoid impacts to biological resources. This alternative was previously rejected because it would not provide an equivalent level of groundwater recharge, and the reduced number of residents that would share the cost did not make this an economically attractive alternative (1987 EIR, p. VII-3). However, current project plans include a revised service area that is limited to the RWQCB prohibition zone. Revisions to the assessment district formed to finance this project were required to accomplish this change, and although the total amount of treated wastewater that can be utilized for groundwater recharge purposes has been reduced, this reduction also minimizes the amount of sensitive habitat that will be impacted by the required effluent disposal facilities.

Other project alternatives rejected in 1987 include a modified water source, which would not address the degradation of groundwater or comply with the Regional Water Quality Control Board's order; and, use of contaminated groundwater for agricultural purposes, which was deemed infeasible based upon extraction and pumping costs, the potential for seawater intrusion, further groundwater degradation, and impacts to a freshwater marsh area along the southern fringe of Morro Bay (1987 EIR, p. VII-4 - VII-5).

The 1987 EIR also evaluated alternative project components. With respect to collection systems, conventional gravity systems, pressure sewer systems (including septic tank effluent pumping, or "step" and grinder pump systems), variable-grade gravity systems, and combination systems were considered. The combined use of conventional gravity and pressure collection systems were selected from an environmental, feasibility, and cost standpoint (1987 EIR, p. VII-5 - VII-10). Regarding treatment system alternatives, the 1987 EIR analyzed a regional treatment system at the Morro Bay-Cayucos treatment plant, a central community treatment system (proposed project), and neighborhood subsystems. Treatment at Morro Bay was rejected based on increased project costs and failure to recharge groundwater, while neighborhood subsystems was rejected because of increased project costs and community opposition (1987 EIR, p. VII-10 - VII-112).

Alternative disposal systems contemplated by the 1987 EIR included ocean disposal, rapid infiltration (percolation ponds), agricultural utilization, and a combination of disposal alternatives including aquaculture treatment and wetland disposal. The ocean outfall alternative was rejected due to higher costs, unknown environmental consequences, and the failure to recharge groundwater supplies. The alternative of utilizing treated wastewater for agricultural purposes was rejected because it would only be feasible during the dry portion of the year, the long term commitment of an adequate number of agricultural operators could not be guaranteed, and it would require more advanced levels of treatment. The use of aquaculture as an alternative treatment process, where water plants such as duckweed or water hyacinth are cultivated in ponds through which wastewater is passed, was rejected because of potential unreliability with regard to nitrate removal, the need for approximately 18.4 acres of additional

land area, and the potential for exotic aquatic plants to invade native wetland systems (1987 EIR, p VII-14 - VII-21).

In a 1989 Supplement to the 1987 EIR (1989 SEIR), San Luis Obispo County reexamined the potential use of on-site wastewater management systems, and the establishment of a wastewater management district to oversee necessary septic system improvements and maintenance, similar to the alternative recently proposed by the Solutions Group. According to the 1989 SEIR, this alternative "had been rejected by the County and affected state and federal agencies as early as 1978. However, because of community concerns, it was reexamined by the Engineering Department and has been included in this Supplement." The County Engineering Department rejected this alternative because: it would require special legislation; continued effluent disposal from septic tanks within the Los Osos groundwater basin is specifically prohibited by the RWQCB; the financial burden of a maintenance district over the life of the project would be more expensive than a conventional sewer system; and, the County would become liable for all discharges in the district and for enforcing compliance by individual property owners.

In 1995, the County conducted a more detailed evaluation of alternatives for managing wastewater in Los Osos, in which more than 40 alternatives were considered. This County sponsored investigation, known as the "Task G Report", identified alternative wastewater management technologies, and evaluated them on a technical merit and cost basis. The objective of this effort was to develop alternative system plans that would reduce nitrate contamination of groundwater at a lower cost than the project proposed in 1987. This report concluded that the preferred plan was to adopt a conventional wastewater system for all areas of the community. However, the citizen-based Technical Advisory Committee participating in the review of alternatives objected to this conclusion. The report did not document any opportunities to minimize project impacts on environmentally sensitive habitat areas through the use of alternative technologies.

Conclusion

Throughout the history of the wastewater treatment project, numerous alternative technologies and designs have been considered. Most recently, the use of wells for effluent disposal rather than the proposed Rapid Infiltration Ponds has been incorporated into the project to reduce impacts on environmentally sensitive habitats. In addition, an analysis comparing the environmental impacts of the County project and the alternative proposed by the Solution Group has recently been completed. This analysis concludes that the Solution Group project will not avoid or minimize impacts to environmentally sensitive habitats when compared to the County project. Therefore, as conditioned, the County project is consistent with LCP Policies for Environmentally Sensitive Habitat areas which require that new development minimize impacts to such areas.

E. Biological Mitigation:

LCP Requirement: No Significant Impact to Environmentally Sensitive Habitats; Ensure Biological Continuance of Sensitive Species

When new development is proposed within or adjacent to environmentally sensitive habitats, the LCP requires that the development must not have a significant adverse impact on such habitats, must allow for the biological continuance of the habitat, and must provide for the maximum feasible mitigation. As previously noted, LCP Policy 33 for Environmentally Sensitive Habitats requires that vegetation which is rare or endangered, or serves as cover for

endangered wildlife, must be protected against any significant disruption of habitat value. Other such LCP provisions include:

- Policy 1 for Environmentally Sensitive Habitats, which requires that "New development within or adjacent to locations of environmentally sensitive habitats (within 100 feet unless sites further removed would significantly disrupt the habitat) shall not significantly disrupt the resource...".

- Policy 2 for Environmentally Sensitive Habitats, which requires "As a condition of permit approval, the applicant is required to demonstrate that there will be no significant impact on sensitive habitats and that proposed development or activities will be consistent with the biological continuance of the habitat. This shall include an evaluation of the site prepared by a qualified professional which provides a) the maximum feasible mitigation measures (where appropriate) , and b) a program for monitoring and evaluating the effectiveness of mitigation measures where appropriate."

- CZLUO Section 23.07.170a(1), which requires that permit applications for projects within or adjacent to Environmentally Sensitive Habitat "identify the maximum feasible mitigation measures to protect the resource and a program for monitoring and evaluating the effectiveness of the mitigation measures".

- CZLUO Section 23.07.170b., which requires that approvals of projects within or adjacent to environmentally sensitive habitats be accompanied by a findings that "there will be no significant negative impact on the identified sensitive habitat and the proposed use will be consistent with the biological continuance of the habitat", and "the proposed use will not significantly disrupt the habitat".

- Standards for environmentally sensitive habitat areas established by CZLUO Section 23.07.170d include "(1) New development within or adjacent to the habitat shall not significantly disrupt the resource" and "(4) Development shall be consistent with the biological continuance of the habitat".

Analysis

Under the LCP requirements identified above, the wastewater treatment project must mitigate for its unavoidable impacts to environmentally sensitive habitats to a degree that will ensure that the impacts of the project will not result in a significant adverse impact to the affected habitats, or jeopardize their biological continuance. The first step in confirming compliance with this requirement is to document the impacts to environmentally sensitive habitats that will result from project implementation.

1) Biological impacts of the treatment plant:

The treatment plant and associated facilities will result in a total site disturbance of 6.9 acres on a 10 acre parcel. 6.7 acres of the disturbed area is considered to be environmentally sensitive habitat, as it provides suitable habitat for the federally endangered Morro shoulderband snail, Morro Bay kangaroo rat, and Indian knob mountainbalm, as well habitat for other special status species including the Morro blue butterfly, Black legless lizard, and Monarch butterfly. As documented by the 1997 SEIR and the County's biological mitigation proposal, this habitat is comprised of: 1.4 acres of Chamise - Wedgeleaf Ceanothus chaparral; 0.7 acres of coastal scrub habitat dominated by Heather Goldenbush; 2.9 acres of coastal scrub habitat dominated by Dune Lupine; and 1.7 acres of Veldt Grass grassland which, although non-native, has been found to contain shells of the Morro Shoulderband Snail at this location.

2) Biological impacts of treated wastewater disposal facilities:

Under the County's original proposal, a total of 14 acres of the Broderson site would be disturbed by the construction of the Rapid Infiltration Ponds and associated infrastructure. 11.3 acres of this area is considered environmentally sensitive habitat. This included suitable habitat for the Morro Bay Kangaroo Rat, Morro Shoulderband Snail, Morro Blue Butterfly, Monarch Butterfly, Black Legless Lizard, California Spotted Owl (which may use this area to forage for Dusky-Footed Woodrats), and numerous special-status vascular plant species.

As previously discussed, the recent change to gravity dry wells has significantly reduced the amount of habitat that will be lost as a result of disposal facility construction, to approximately 3.5 acres. The same specific types of habitat that would be impacted by the construction of the percolation ponds will be impacted by the wells, but to a lesser degree due to their smaller footprint.

3) Indirect biological impacts:

Indirect impacts to environmentally sensitive habitats include those impacts that will result from new development facilitated by the elimination of septic tank moratorium established by the RWQCB. Such development will be regulated by the San Luis Obispo County certified LCP, which contains provisions to ensure that such development will take place consistent with the protection of environmentally sensitive habitats. The current effort to update the Estero Area Plan being undertaken by the County includes programs to improve the protection of sensitive habitats throughout the Los Osos area, such as a transfer of development program, clustered subdivisions and changes in zoning densities.

Given the fact that there is a certified LCP in place for the area that will be serviced by the project, the Commission must rely upon the LCP and the local coastal development permit processes to resolve the biological impacts of future development, rather than require the wastewater treatment project to mitigate these impacts. Impacts to sensitive habitats by future development will be subject to future coastal development review and approval, and must provide appropriate

mitigation, consistent with LCP standards, independent of the mitigation provided through this permit.

4) Adequacy of proposed mitigation:

As previously described, the County's mitigation plan (Exhibit 13) proposes to mitigate direct biological impacts by preserving the remaining 2.9 acres of the treatment plant site, as well as the remaining 66 acres of the effluent disposal site, as open space habitat conservation areas. In addition, areas of the disposal site between the wells, and the area between the wells and the homes along Highland Avenue, would be preserved and restored as native dune scrub habitat, as would the undeveloped portion of the treatment plant site. The mitigation proposal also includes the acquisition of 40 additional acres of good coastal scrub habitat in large parcels, contiguous with other open space areas, in order to mitigate for secondary biological impacts. As noted above, future development must comply with LCP standards regarding the protection of environmentally sensitive habitats, and, as a result, this project is not responsible for mitigating these impacts. Thus, it is appropriate for the Commission to consider the entire biological mitigation proposal as applying to the mitigation of the project's direct impacts to sensitive habitat areas. Impacts to sensitive habitats from future development will be subject to future coastal development review and approval, and must provide appropriate mitigation, consistent with LCP standards, independent of the mitigation provided through this permit.

In analyzing the adequacy of this proposal with LCP standards, it is necessary to determine whether or not the mitigation will preserve the same type of habitat impacted, in adequate quantities, so that, overall, the project would not significantly disrupt such areas, or jeopardize their biological continuance. In determining the appropriate size of a mitigation area, resource and regulatory agencies typically require a mitigation site of greater size than the area of impact. This is intended to account for interim habitat losses and reduced functional capacity, the uncertain habitat values that will result from the mitigation over the long term, and the need to minimize the overall loss of habitat acreage. The area of mitigation, as compared to the area of impact, is commonly referred to as the "mitigation ratio".

In cases similar to the subject project (i.e., projects which impact coastal scrub habitat), the Department of Fish and Game recommends that unavoidable impacts to sensitive habitats of the Central Coast be mitigated by setting aside 3 acres or more of the same type of existing habitat. In addition, the Department recommends restoring 1 acre of the impacted type of habitat for each acre lost, depending upon the habitat type (some projects may require greater amounts of acquisition and/or restoration depending upon the particular circumstances related to the feasibility of restoration). This is intended to ensure that if restoration is unsuccessful, the maximum amount of habitat lost over time does not exceed 25%. These requirements translate to a 4:1 mitigation to impact ratio.

A comparison of project impacts to the proposed mitigation, based on the information contained in the County's mitigation proposal, is provided in the following table. It is important to note that as described in the mitigation proposal, the 14 acres of habitat impacted at the disposal site was derived from the footprint of the previously proposed Rapid Infiltration Ponds. These impacts will be significantly reduced through the use of disposal wells rather than ponds.

Type of Habitat	Acreage of Disturbance - Treatment Site	Acreage of Preservation - Treatment Site	Acreage of Disturbance - Disposal Site	Acreage of Preservation - Disposal Site
Chamise - Wedgeleaf Ceanothus Chaparral	1.4	2.3	0.1	0.2
California Sagebrush - Black Sage Scrub	0	0	0.2	0.4
Coastal Scrub Habitat Dominated by Heather Goldenbush	0.7	0.01	8.1	3.5
Coastal Scrub Habitat Dominated by Dune Lupine	2.9	1.4	2.9	2.8
Non-Native Veldt Grass Grassland: - Morro shoulderband snail habitat - not Morro shoulderband snail habitat	1.7	0.1	0.5	1.8
Windrow (Eucalyptus Trees) - Monarch Butterfly Habitat	0	0	1.1	2.4
Coast Live Oak Forest/Manzanita	0	0	0.7	± 60
TOTALS (does not include non-native veldt grass that does not provide habitat for the Morro shoulderband snail)	6.7	3.81	13.1	± 69.3

According to the figures above, the proposed on-site habitat preservation and restoration will not result in the protection of equivalent types and amounts of dune scrub habitat that will be impacted by the project. 8.8 acres of coastal scrub habitat dominated by heather goldenbush will be impacted by the project, and 3.51 acres will be preserved; 5.8 acres of coastal scrub habitat dominated by Dune lupine will be impacted, and only 4.2 acres will be preserved. The remaining area proposed for preservation on the effluent disposal site (approximately 60 acres), although important habitat for the Morro Manzanita, does not provide “like for like” mitigation when compared to project impacts.

Furthermore, the proposed on-site mitigation does not achieve the 4:1 “like for like” mitigation ratio recommended by the Department of Fish and Game. The overall on-site mitigation is short 3.5 acres of Chamise - Wedgeleaf Ceanothus chaparral habitat, 0.4 acres of California Sagebrush - Black Sage habitat, 31.69 acres of coastal scrub habitat dominated by Heather Goldenbush, and 19 acres of coastal scrub habitat dominated by Dune Lupine in meeting this standard.

The additional 40 acres of dune scrub habitat proposed to be acquired by the County, and the 10.5 acre reduction in impacts to coastal dune scrub associated with the use of disposal wells rather than ponds, will, however, adequately address these shortfalls. The 40 acres to be acquired, when combined with the on-site mitigation measures and the use of disposal wells, will result in a total mitigation area of approximately 119.5 acres. Compared to a total impact area of approximately 10.2 acres (6.7 acres at the treatment site, and approximately 3.5 acres at the disposal site), the 119.5 acres of mitigation equates to more than 11 acres of mitigation for every one acre impacted. If no credit is given for the 60 acres of Coast live oak forest and Morro manzanita that will be preserved by this mitigation proposal (since the project is not impacting this type of habitat), the proposal results in the preservation and restoration of 59.5 acres of coastal dune scrub habitat. This achieves a coastal dune scrub mitigation area that is more than 5 times larger than the 10.2 acres of coastal dune scrub that will be impacted by the project.

Another benefit of the proposed mitigation will be the preservation of higher quality habitat than the quality of the habitat that will be impacted. The quality of the habitat at the treatment plant site is diminished by the fact that it is surrounded on 3 sides by development, and as a result, represents a fragmented habitat area that has limited value towards the long term survival of the sensitive species found on the site. Similarly, the habitat that will be impacted by the installation of effluent disposal facilities on the lower portion of the disposal site, while of higher quality than the wastewater treatment plant, is in close proximity to residential development, and is being adversely impacted by invasive plants. In comparison, the upper portion of the effluent disposal site that will be preserved provides a larger habitat area further removed from existing development, in close proximity to State Park property. Furthermore, the 40 acres of coastal scrub habitat area to be acquired by the County will be a contiguous with other open space lands and within areas proposed for the protection by the U.S. Fish and Wildlife Service recovery plans for the affected species. As a result, concerns regarding the quality of habitat provided by mitigation sites, which may warrant higher mitigation ratios in other cases, have been appropriately addressed.

While the County's biological mitigation proposal exceeds the 4:1 mitigation to impact ratio suggested by the Department of Fish and Game, it lacks the details necessary to ensure that these measures will effectively prevent the project from having a significant impact on environmentally sensitive habitat areas. This includes information regarding the exact location and biological composition of the mitigation site(s), and maintenance and monitoring provisions to ensure the long-term success of the proposed habitat preservation. In addition, the comparative analysis recently completed identified that the County project may affect the wetland habitats by decreasing subsurface groundwater flows to Baywood Marsh and increasing these flows to Pecho Marsh, and Sweet Springs Marsh. No provisions to monitor or mitigate these impacts are provided by the mitigation proposal.

Special Condition 3 therefore requires the County to submit a final mitigation plan, for Executive Director review and approval, which includes, but is not limited to the specific elements described in Special Conditions 3 and 4, to address these issues. The final plan must contain specific monitoring and maintenance provisions to ensure that the project will not result in a significant disruption to sensitive terrestrial or wetland habitats long-term success of the mitigation measures. The details of these measures must be developed in coordination with the Department of Fish and Game and U.S. Fish and Wildlife Service, and approved by these agencies *prior to the issuance of the Coastal Development Permit*. The mitigation and monitoring provisions must be conducted over a five-year period, commencing when wastewater treatment service becomes available, with a minimum monitoring frequency of one inspection every four months.

To ensure the long-term success of the proposed mitigation, Special Condition 3 also requires the submission of a report, at the conclusion of the five year maintenance and monitoring period, which identifies any impact to Baywood Marsh, Pecho Marsh, and/or Sweet Springs Marsh, in terms of habitat value and extent, attributable to the project. The report must also identify any failure to achieve the objectives and performance standards of the approved biological mitigation plan. In the instance that any significant disruptions to wetland habitat values are observed, or the requirements of the approved biological mitigation plan are not achieved, an extended monitoring and maintenance program, including appropriate corrective actions, must be implemented until successful implementation of the mitigation measures has been achieved and the biological continuance of wetland habitats has been assured.

With respect to the selection and acquisition of appropriate mitigation sites, Special Condition 3 requires that the biological mitigation plan be accompanied by evidence that the County has secured a mitigation site that meets the established criteria for mitigation; or, a binding agreement with an agency or organization qualified to effectively implement the required mitigation. The latter option is intended to allow for the County to pursue an agreement that would allow the U.S. Fish and Wildlife Service, or other qualified agency or organization, to implement the proposed mitigation, which would be financed by the County. Under this option, the Executive Director would have to review and approve such an agreement prior to the issuance of the permit, and evidence that the proposed mitigation sites have been acquired would have to be provided prior to the commencement of construction.

Additional measures to further minimize impacts to sensitive resource present at the treatment plant and effluent disposal construction sites are required by Special Conditions 3 and 4. These conditions require a qualified biologist to relocate any Black legless lizards or Morro shoulderband snails that are observed within the construction areas to a suitable habitat nearby that is not subject to construction disturbance. This condition is commonly utilized by the Commission to prevent adverse impacts to Black legless lizards, and is appropriate to utilize in this instance to minimize project impacts to sensitive resources, as directed by the LCP. These conditions also require transplanting of sensitive plant species found within all project construction areas.

Finally, Special Condition 12 requires evidence of other agency approvals, including authorizations from the U.S. Fish and Wildlife Service, and the California Department of Fish and Game, to ensure that the project complies with state and federal endangered species acts.

Conclusion

Site-specific information will be required at the appropriate time to ensure that the biological mitigation proposed by the County will prevent the project from having a significant adverse impact on environmentally sensitive habitats, or jeopardize their biological continuance. This includes the exact location of the mitigation sites, specific measures for carrying out the proposed mitigation, and for ensuring the long term success of the mitigation, as well as evidence of compliance with state and federal regulations protecting endangered species. In addition, the relocation of sensitive species that may be impacted by project construction, is also necessary to minimize project impacts on sensitive resources. As a result the Special Conditions described above have been attached to this permit, and will ensure project conformance with the previously cited LCP policies relevant to the protection of environmentally sensitive habitat areas.

FINDING FIVE: HAZARDS

Throughout the review of this project, the public has expressed concern about potential hazards associated with locating the treated effluent disposal facilities uphill from, and nearby, a residential area. In particular, residents are concerned about an unplanned release of treated effluent (e.g., during a seismic event), as well as the potential for disposed effluent to travel horizontally rather than vertically, and surface down slope of the disposal facility. Related to these concerns is the allegation that the County has not adequately analyzed the hazards of using wells rather than ponds for the disposal of treated effluent.

With respect to these concerns, the following LCP provisions apply:

LCP Policy 1 for Hazards states, in relevant part:

> All new development proposed within areas subject to natural hazards from geologic or flood conditions (including beach erosion) shall be located and designed to minimize risks to human life and property. …

LCP Ordinance 23.05.040 provides:

> Standards for the control of drainage and drainage facilities provide for designing projects to minimize harmful effects of storm water runoff and resulting inundation and erosion on proposed projects, and to protect neighboring and downstream properties from drainage problems resulting from new development. The standards of Section 23.05.042 through 23.05.050 [Drainage Plan Requirements] are applicable to projects and activities required to have land use permit approval.

Analysis

Concerns regarding the hazards of the project's disposal facilities was a primary issue addressed during the appeal of the Planning Commission's approval to the Board of Supervisors. For the most part, these issues were characterized by the County as differences of opinion between the experts hired by the County and the appellants.

In February 1996, a hydrogeologic evaluation of the disposal site was completed. The various tests and evaluations conducted as part of this study, are summarized by a letter from the County's consultants dated April 3, 1997. As stated by this letter:

> "From the testing data, evaluation of test results and the refinement of the USGS groundwater model, Metcalf & Eddy, Inc. (M&E) has concluded that the use of the Broderson site for infiltration of the effluent from the proposed wastewater treatment facility will not result in either surfacing of groundwater flows in the vicinity of the infiltration basins nor will groundwater levels be increased such that liquefaction risks within the existing (and anticipated) urbanized area increase beyond existing liquefaction levels."

Notwithstanding this conclusion, it has been asserted that the change from percolation ponds to disposal wells may result in new hazards to down slope residences. In considering this concern, it is important to recognize that these two methods of disposal are generally the same; both rely upon the vertical percolation of water through the soil matrix as a method of recharging ground water supplies. The primary difference is that where the infiltration surface for the ponds was a horizontal surface, the area of permeability provided by the wells is vertical.

This issue was examined in detail by the Draft Evaluation of Effluent Disposal at the Proposed Broderson Recharge Site produced by Metclaf & Eddy, for the County of San Luis Obispo, dated November 21, 1997. This report, which concludes that dry well disposal of treated waste water at the Broderson site is viable, states that this method of disposal would not increase soil moisture at depths shallower than 16 feet bgs (below ground surface) at any location away from the discharge well (p.18). Thus, this disposal method is not expected to pose a risk to the homes along Highland Avenue, downslope of the disposal facilities. This conclusion was based on tests that demonstrated a downward movement in the moisture that will be discharged by the disposal wells.

With respect to LCP drainage requirements, the April 3, 1997 letter from Metcalf & Eddy stated that by providing an on-site detention basin, the disposal facilities would improve existing drainage conditions. According to the project engineer, final plans for the disposal facilities that reflect the change from percolation ponds to disposal wells will maintain this detention basin. To ensure that drainage issues for all project facilities are adequately addressed, Special Condition 2 requires final plans for the disposal facilities to be accompanied by an updated drainage plan that meets the requirements of Coastal Zone Land Use Ordinance 23.05.044 (Drainage Plan Preparation and Content). These plans must be reviewed and approval of the Executive Director prior to the commencement of construction. In addition, Special Condition 9 includes specific requirements for all construction activities to ensure that LCP policies and ordinances relevant to drainage and erosion are adequately addressed.

Conclusion

Potential hazards posed by seismic activitiy, erosion, improper drainage, and the storage of chemicals associated with the proposed wastewater treatment facilities have been appropriately considered in the review of a coastal development permit for the Los Osos Wastewater Treatment project. A number of conditions have been attached to this permit to eliminate or mitigate these potential hazards (please see Special Conditions 2 and 9). In accordance with the detailed engineering evaluations performed for San Luis Obispo County, the project has been designed and conditioned to minimize risks to human life and property, consistent with LCP Policy 1 for Hazards.

Preliminary plans for wastewater disposal facilities do not, however, fully provide the drainage information required by LCP Ordinance 23.05.040. As a result, Special Condition 2 requires final plans for the disposal facilities to include such information, subject to the review and approval of the Executive Director. With this and other cited conditions, the project is consistent with the policies and ordinances of the San Luis Obispo County LCP addressing hazards.

It is also noted that by eliminating the use of individual septic systems, the project is intended to reduce existing hazards to human health associated with the high levels of nitrates and bacteria found in the Los Osos Groundwater Basin and the Morro Bay National Estuary.

FINDING SIX: PROJECT CAPACITIES, PHASING, AND SERVICE AREA

An important issue relevant to certified jurisdictions' or the Commission's appellate review of "treatment work" projects in the coastal zone, pursuant to Coastal Act Section 30214 (c), is the geographic limits of service areas and the capacity of the treatment works to allow for phasing of development and use of facilities in a manner consistent with the certified LCP; and, development projections used to determine the sizing of the treatment works.

In the case of the subject project, the San Luis Obispo County certified LCP regulates the intensity of new development, and specifies those areas that are eligible to receive wastewater treatment service. The proposed project's consistency with these standards is analyzed below.

LCP Requirements

Local Coastal Plan Policy 2 for Public Works states:

> New or expanded public works facilities shall be designed to accommodate but not exceed the needs generated by projected development within the designated urban reserve lines. Other special contractual agreements to serve public facilities and public recreation areas beyond the urban reserve line may be found appropriate.

The implementing ordinance for the above policy, Section 23.04.430 of the CZLUO, states:

> A land use permit for new development that requires water or disposal of sewage shall not be approved unless the applicable approval body determines that there is adequate water and sewage disposal capacity available to serve the proposed development, as provided by this section. Subsections a. and b. of this section give priority to infilling development within the urban service line [USL] over development proposed between the USL and URL [Urban Reserve Line]. In communities with limited water and sewage disposal service capacities as defined by Resource Management System alert Levels II or III:
>
> a. A land use permit for development to be located between an urban services line and urban reserve line shall not be approved unless the approval body first finds that the capacities of available water supply and sewage disposal services are sufficient to accommodate both existing development, and allowed development on presently-vacant parcels within the urban services line.
>
> b. Development outside the urban services line shall be approved only if it can be served by adequate on-site water and sewage disposal systems, except that development of a single-family dwelling on an existing parcel may connect to a community water system if such service exists adjacent to the subject parcel and lateral connection can be accomplished without trunk line extension.

Section 23.04.432 of the CZLUO states:

> To minimize conflicts between agricultural and urban land uses, development requiring new community water or sewage disposal service extensions beyond the urban services line shall not be approved.

The location of the urban service line and urban reserve line designated by the LCP for the South Bay Urban Area is illustrated by Exhibit 4, attached.

Other applicable LCP Polices for Public works include Policy 8, which states:

> Where existing or planned public works facilities can accommodate only a limited amount of new development, the following land uses shall have priority for services in accordance with the Coastal Act and be provided for in the allocation of services in proportion to their recommended land use within the service area.
>
> a. Uses which require location adjacent to the coast (coastal-dependent uses).

b. Essential public services and basic industries vital to the economic health of the region, state, or nation including agriculture, visitor-serving facilities and recreation.;

and Policy 9, which states:

For any development that constitutes a treatment works (PRC 30120), issuance of a permit shall be consistent with the certified LCP and PRC 30412 and shall address the following aspects of such development:

a. The siting and visual appearance of treatment works within the coastal zone.

b. The geographic limits of the service area within the coastal zone which is to be served by the treatment works and the timing of the extension of services to allow for phasing of development consistent with the certified LCP.

c. Projected growth rates used to determine the sizing of treatment works.

Analysis

The LCP provisions cited above regulate both the capacity and service area of new wastewater treatment projects, and sets priorities regarding connections to wastewater treatment systems. Under these provisions, new wastewater treatment projects must be sized to serve the buildout within the Urban Reserve Line allowed under the LCP. However, wastewater treatment service can only be provided to development located within the Urban Service Line, and coastal dependent, visitor-serving, and recreation land uses have priority for connecting for such services . Projects located between the Urban Service Line and Urban Reserve Line are not eligible for wastewater treatment service until such a time that the LCP has been amended to include such properties within the Urban Service Line. In this way, treatment projects can be sized to accommodate full buildout within the Urban Reserve Lines, but the expansion of treatment services outside the Urban Service Line must take place only after such expansions have been determined to be consistent with the Coastal Act.

The vast majority of the proposed service area (Exhibit 3) is located within the Urban Service Line; however, a very small area at the southeast and southwest corners of the proposed service area, as well as a portion at the northern edge, is outside of the Urban Services Line, but within the Urban Reserve Line. As regulated by the LCP, providing wastewater treatment service to these areas will be dependent upon an amendment to the LCP which incorporates these areas into the Urban Service Line. To maintain consistency with this LCP requirement, Special Condition 15 of this permit eliminates those areas located outside of the Urban Service Line from the approved project's service area. This condition also specifies that future additions to the service area within the coastal zone shall require a separate coastal development permit or an amendment to this permit, and must be proceeded or submitted concurrently with an LCP amendment that incorporates the proposed service area expansion within the Urban Service Line designated by the LCP.

With respect to the sizing of the project, the proposed wastewater treatment system is designed to accommodate the buildout allowed by the certified LCP within the South Bay Urban Area Urban Reserve Line, consistent with LCP Policy 2 for Public Works. To determine the capacity necessary to service the buildout of this area, a land use based methodology was used. This methodology derived Dwelling Unit Equivalent (DUE) projections according to the land use designations contained in the certified LCP, and applied a daily wastewater flow rate of 200 gallons per DUE. This flow rate is considered conservative by the project engineers, and was

used to ensure that adequate treatment capacity was provided by the constructed facilities, consistent with the aforementioned policy.

The methodology used to determine the appropriate service capacity for the wastewater system assumes that the maximum intensity of development allowed under the LCP would be realized. Similarly, the assessment formed by the County to finance the project is based upon the assumption that the future development of currently vacant lots would occur at the maximum intensity allowed under current LCP land use designations. These assumptions do not account for the fact that maximum development intensities may not be realized due to constraints such as the presence of environmentally sensitive habitats that may be located upon a site proposed for development. As a result, a concern is raised that the assessments levied by the County creates expectations that maximum development intensities can be realized, regardless of other constraints that would need to be addressed through the coastal development process, and that may require a lower intensity of development.

To address this issue, Special Condition 13 clarifies that Commission approval of this permit, or any method of financing the project utilized by the County (e.g., the established assessment program), does not guarantee Coastal Commission or local government approval of any new or intensified uses within the service area, and that all new development proposals must be reviewed for consistency with the San Luis Obispo County certified Local Coastal Program and/or California Coastal Act, as applicable. This condition also requires that the permittee notify property owners within the service area of this condition, so that no false expectations regarding development potential result from this project.

The above condition will adequately address the potential for the project to facilitate new development that may be inconsistent with the LCP throughout most of the proposed service area, which is primarily urbanized and composed of small lots that can not be further subdivided. There is one exception to this, however, in the southern portion of the service area. Three parcels totaling 112 acres, known as the Morro Palisades, is almost entirely composed of significant environmentally sensitive habitat. This habitat area has been identified by the U.S. Fish and Wildlife Service as essential habitat for the Morro Bay Kangaroo rat, and is listed as a conservation planning area in the Draft Recovery Plan for the Morro shoulderband snail and four plants from San Luis Obispo County (USFWS, Sept., 1997).

Based upon a current zoning designation for the site limiting residential development to an intensity of between 3 and 5 units per acre, the Morro Palisades was originally assessed for 446.8 benefit units (one benefit unit is equivalent to one residence), assuming a future development potential of 4 units per acre. According to the County Engineer, this assessment was recently reduced to 89 benefit units at the request of the property owner. However, the LCP has not been revised to reflect this reduction in future development. It is premature to conclude that either 89 or 446 residential units are allowable on this 3 parcel site, based upon LCP requirements to protect environmentally sensitive habitats.

As described earlier in this report, addressing the negative effects of existing septic systems on water quality is the primary purpose of this project. Therefore, the first phase of the collection system and the first stage of the treatment plant have been designed to provide wastewater treatment service to those areas of the community most in need; the areas with less than 30 feet to groundwater. The Morro Palisades properties, however, have a much higher depth to groundwater and are currently undeveloped. Nevertheless, they have been included within Phase I of the service area. This is especially unusual due to the fact that the areas down slope of the Morro Palisades are within Phase II of the service area. In keeping with the primary objective of addressing existing sources of groundwater degradation, Special Condition

3 of this permit requires that the Morro Palisades be removed from the first phase of the project.

As proposed, Phase II of the collection system would be constructed concurrently with Phase I, but connections to the system within the Phase II service area would be installed only after the successful operation of the effluent disposal facilities has been documented over a two year period. Stage I of treatment plant construction would include the site preparation necessary to accommodate the additional facilities associated with Stage II, and construction of the effluent disposal facilities would be sized to accommodate the total quantity of effluent that will be generated by project buildout.

In order to minimize impacts to environmentally sensitive habitats associated with the Stage II expansion of the treatment plant, and to more accurately size the plant to serve the area permitted by the LCP, Special Condition 2.a. limits initial project construction to those facilities necessary to accommodate Stage I of the treatment plant. As required by Special Condition 17, the buildout of the second stage of the treatment plant, to the extent currently proposed, is contingent not only upon the operational effectiveness of the first phase, but the actual service levels provided during the first phase, and any changes in land use designations or expected development intensities, that would allow for a reduction in project buildout. This will enhance opportunities to reduce project impacts on environmentally sensitive habitats, as a reduction in the capacity of the second stage of the plant would allow for reductions in the amount of habitat disturbed at the treatment plant site. The Commission will have the opportunity to review this issue prior to the construction of the second phase of the project pursuant these Special Conditions.

With respect to those land uses that have priority to receive wastewater treatment services under the LCP, the wastewater treatment project has been sized to accommodate the buildout allowed under the current LCP. As a result, there will be adequate capacity to serve Coastal Act priority uses such as coastal dependent, visitor serving, and recreational facilities, as required by LCP Policy 8 for Public Works. However, to account for the potential that at some point in the future an allocation program for remaining treatment capacities may be proposed to address other land use constraints (e.g., a limit on the number of new homes that can be constructed in order to comply with air quality standards), Special Condition 1.c. requires that any such program be approved by the Commission either through an amendment to this permit or through amending such a program into the Local Coastal Program (LCP). This will ensure that any wastewater treatment capacity allocation program proposed in the future will be reviewed for conformance with the requirement to reserve capacities for priority uses.

Conclusion

As conditioned to re-assess the final sizing of the second stage of the treatment plant, the proposed wastewater treatment project has been appropriately sized to serve the maximum intensity of development allowed within the Urban Reserve Line by the San Luis Obispo County LCP, as required by LCP Policy 2 for Public Works. However, it is necessary to clarify that the approval of this permit, or the assessment utilized by the County to finance the project, does not guarantee any future development within the coastal zone, and that such development will be subject to coastal development permit review and approval.

With the exception of three small portions of the proposed service area indicated by Exhibit 3, the portion of the Community that will be served by the project is consistent with the Urban Service Line established by the LCP. Special Condition 15 of this permit require the permittee to eliminate the areas outside of the Urban Service Line from the projects service area, in order to comply with CZLUO Section 23.04.432.

In addition, Special Condition 16 of the permit requires that if any allocation program for remaining wastewater treatment capacities is proposed in the future, it must be reviewed and approved by the Commission. Such review is necessary to ensure that the allocation program reserves adequate wastewater treatment capacity for Coastal Act priority uses, as required by LCP Policy 8 for Public Works.

Finally, Special Conditions 2 and 4 require that prior to constructing the second stage of the treatment plant, the Commission have the opportunity to review the status of the project, and, if appropriate, reduce the buildout of the project to meet actual land use needs. This will provide an opportunity to reduce project impacts on environmentally sensitive habitats, as required by the LCP policies previously identified in this report. Consistent with this objective, Special Condition 4 also requires that the most environmentally significant portion of the proposed service area, the Morro Palisades, be within Phase II of the project rather than Phase I. (This site also does not meet the criteria established for areas to be serviced by the first phase of the project). This change will also achieve consistency with the stated intention to serve those areas with less than 30 feet to groundwater during the first phase of the project.

FINDING SEVEN: WATER RESOURCES

The proposed project has been initiated by the County, under the directives of the Regional Water Quality Control Board (RWQCB), in order to protect the water quality of the Los Osos groundwater basin. It has been developed in close consultation with the RWQCB, who has endorsed the project, and urged its timely approval. Other organizations, such as the Morro Bay National Estuary Program, have identified problems of high nutrients and bacteria levels within Morro Bay that are of concern to the long-term health of the estuary, and have resulted in a downgrading of the local shellfish harvesting areas. Protecting the quality of Morro Bay's coastal waters, marine habitats, and the Los Osos groundwater basin is clearly dependent upon the timely implementation of a solution to the wastewater treatment and disposal needs of the Los Osos community.

LCP Requirements

LCP Policy 1 for Coastal Watersheds states:

> "The long-term integrity of groundwater basins within the coastal zone shall be protected. The safe yield of the groundwater basin, including return and retained water, shall not be exceeded except as part of a conjunctive use or resource management program which assures that the biological productivity of aquatic habitats are not significantly adversely impacted."

Policy 2 for Coastal Watersheds states, in relevant part:

> "Groundwater levels and surface flows shall be maintained to ensure that the quality of coastal waters, wetlands and streams is sufficient to provide for optimum populations of marine organisms, and for the protection of human health."

Analysis

In order to maintain the safe yield of this basin, the project proposes to dispose of treated wastewater in a manner that will recharge the groundwater basin. Project hydrogeologic studies identify that the disposed effluent will primarily go into the upper aquifer and produce a net basin balance. These reports further identify that some of this water will likely reach the lower aquifer,

from which the community water supply is obtained. This will be achieved through the percolation of treated effluent through the permeable soils at the disposal site. The RWQCB has established Waste Discharge Standards for the project to ensure that the disposal of treated wastewater will protect the quality of groundwater resources. More significantly, the RWQCB views this project as an opportunity to remediate the upper aquifer, which currently contains levels of nitrate and bacteria in excess of state drinking water quality and basin Plan standards.

In achieving the LCP's directive to protect groundwater resources, water conservation, as well as proper wastewater handling, is an important issue. In recognition of this, Special Condition 9 requires the County to provide water conservation kits, containing capacity reducers for all toilets and flow restrictors or aerators for all faucets and showerheads, for all existing development to be served by the project. (New development is subject to more stringent statewide plumbing standards that require the use of water conserving fixtures, and therefore would not benefit from such water conservation kits). This requirement will not only assist in maintaining the safe yield of groundwater resources, but may also assist in reducing the actual flow of wastewater such that Stage II capacities of the treatment plant may be reduced. As previously discussed, a reduction in treatment plant expansion will minimize project impacts on environmentally sensitive habitats, as required by the LCP.

Other conditions that have been attached to this permit in order to ensure that the project complies with LCP policies protecting water resources include:

- Special Condition 2.a., which, as recommended by the Comparative Analysis, requires final plans for the treatment facility to include emergency storage for three days or more, or to the extent determined to be adequate by the Regional Water Quality Control Board.

- Special Condition 2.d., which requires that final plans include the details of the On-site Wastewater Management Program, as approved by the Regional Water Quality Control Board. And,

- Special Condition 9, which requires the implementation of specific measures to ensure that construction activities do not have an adverse impact on the quality of adjacent surface waters.

Conclusion

The wastewater treatment project proposed by San Luis Obispo County provides an opportunity to correct the existing groundwater nitrate problem of the Los Osos groundwater basin. The project, as conditioned, will protect and improve the water quality of the Los Osos groundwater basin and Morro Bay estuary, consistent with the objectives of LCP Policies for Coastal Watersheds. In addition, the indirect groundwater recharge that will result from the disposal of treated effluent will help maintain groundwater levels, and restore groundwater quality, consistent with LCP Policies protecting water resources.

FINDING EIGHT: ARCHAEOLOGICAL RESOURCES

The San Luis Obispo County LCP contains six policies relevant to the identification and protection of archaeological resources (Land Use Element, Coastal Plan Policies pages. 12-2 to 12-5). These policies direct development away from archaeological sites if possible (Policy 1) and require mitigation plans for projects which must be located on parcels containing resources (Policy 5). Other policies require preliminary surveys to identify resources and the maintenance of county data files on known sites.

These policies are implemented by Sections 23.07.104 and 23.05.140 of the Coastal Zone Land Use Ordinance. Section 23.07.104 requires a preliminary site survey by a qualified archaeologist for parcels determined to be "archeologically sensitive" as defined in the ordinance. If the preliminary site survey reveals the prescience of archaeological resources, a mitigation plan to protect the resources must be prepared by a qualified archaeologist and considered in the evaluation of the project (23.07.104(c)). According to 23.07.104(d), projects may only be approved if they include adequate measures to protect significant archaeological resources. Section 23.05.104 provides guidance for treatment of archaeological sites discovered during the course of construction. This ordinance requires construction to stop immediately upon discovery and remain stopped until a qualified archaeologist can inventory the site and determine the appropriate disposition of the artifacts or human remains.

Analysis

The EIR prepared for this project includes a section on Cultural Resources. The document notes that the project site lies within the historic territory of the Chumash Native Americans and that the Los Osos area has a long history of habitation by the Chumash because of its proximity to the bay and other sources of food and fresh water.

The EIR authors found two prehistoric sites (CA-SLO-347 and FW-1) on the parcel proposed for development with the sewage treatment plant. These sites were the subject of a "Phase II Testing and Data Recovery Program" which stated that a portion of CA-SLO-347 qualified as a significant site but that FW-1 was not (EIR page 5.9-7). The EIR concluded that "Installation of the treatment plant would result in significant disturbance to, and possibly destruction of, two recorded archaeological sites" and that "There is a potential that the installation of the treatment facilities could result in significant impacts to unknown cultural resources that are currently buried on the project site…." The EIR found that the impacts on the recorded sits (CA-SLO-347 and FW-1) would be adequately mitigated if grading of the sites was monitored by a qualified archaeologist and a representative of the Chumash. Potential impacts to unknown sites discovered during construction would be mitigated by implementing Sec. 22.05.140 of the zoning ordinance which provides for ceasing work until a qualified archaeologist can assess the resources and develop a plan for disposition of the artifacts or human remains. It is unclear how monitoring of grading activities within the identified sites will mitigate impacts on CA-SLO-347 and FW-1 and thus assure consistency with LCP provisions which require protection of archaeological resources. As presently described in the EIR, it is entirely unclear whether the identified sites will be preserved or destroyed. An archaeology report which more clearly specifies the mitigation methods that will be used to preserve these sites is needed to ensure consistency with LCP requirements.

The mitigation plans to preserve the other identified and potential sites located along the path of the collection system and in the vicinity of the disposal well field are equally vague (EIR pages 5.9-7 through 5.9-17). Given the large number of known archaeology sites and the potential for discovery of many others in the Los Osos area, a revised archaeological mitigation plan for the project (treatment plant site, well field site, collection system route, etc.) which clearly describes the resources and specifies how protection will be achieved is necessary to comply with the mandates of the LCP (Please see Condition 9).

FINDING NINE: VISUAL RESOURCES

LCP Requirements

LCP Policy 1 for Visual and Scenic Resources requires:

> Unique and attractive features of the landscape, including but not limited to unusual landforms, scenic vistas, and sensitive habitats are to be preserved and protected, and in visually degraded areas restored where feasible.

LCP Policy 2 for Visual and Scenic Resources states:

> Permitted development shall be sited so as to protect views along the ocean and scenic coastal areas. Wherever possible, site selection for new development is to emphasize locations not visible from major view corridors. In particular, new development should utilize slope created "pockets" to shield development and minimize visual intrusion.

LCP Policy 6 for Visual and Scenic Resources provides:

> Within the urbanized areas defined as small-scale neighborhoods or special communities, new development shall be sited to complement and be visually compatible with existing characteristics of the community which may include concerns for the scale of new structures, compatibility with unique or distinguished architectural style, or natural features that add to the overall attractiveness of the community.

LCP Policy 7 for Visual and Scenic Resources requires:

> The location and design of new development shall minimize the need for tree removal. When trees must be removed to accommodate new development or because they are determined to be a safety hazard, the site is to be replanted with similar species or other species which are to be reflective of the community character.

Analysis

The wastewater treatment facilities authorized by this permit, with the exception of the treatment plant and the lift stations, will be located either below ground, or in the case of the disposal wells, slightly above ground level.

The treatment plant, which is located on the eastern boundary of the Los Osos community, will not impact scenic views of the coast. It does, however, have the potential to diminish the quality of the inland view of a scenic rural area of the County available from the intersection of South Bay Boulevard and Pismo Avenue and the adjacent middle school.

To minimize this impact, Special Condition 10a requires a landscaping plan that provides native, drought tolerant, vegetative screening of the treatment plant (particularly for views from South Bay Boulevard and the adjacent school facility). In addition, Special Condition 10b requires a lighting plan in that includes specific elements designed to reduce glare and the spillage of light from the treatment plant site. With these conditions, the treatment plant will not have a significant adverse impact on the scenic qualities of the area, and will be shielded from visual intrusion, consistent with LCP Policies 1 and 2 for Visual and Scenic Resources.

To further ensure that the treatment plant is visually compatible with the surrounding community, as required by Visual Policy 6, Special Condition 10c requires that the primary structural elements of the buildings shall be no higher than 35 feet above average natural grade. In addition, Special Condition 10f requires that the final design of the treatment plant include elements (architectural treatments, graded berms, exterior materials, exterior color selection) that help the facility blend into the existing environment and provide as much

compatibility with surrounding structures as possible. These elements shall be reviewed by the Planning Director in consultation with the community advisory committee, and incorporated into the final plans submitted for Executive director review and approval, or determination that an amendment is required, pursuant to Special Condition 2.

To address the visual impacts of the pump and lift stations, which are mainly located on the fringes of residential neighborhoods and will not impact views of the coast, Special Condition 10 requires that these facilities be screened with native vegetation.

As required by LCP Policy 7 for Visual and Scenic Resources, the project has been conditioned to minimize impacts to trees, and to revegatate all areas of native vegetation that will be disturbed during installation of pipelines (please see Special Conditions 3, 4, and 10).

Conclusion

As conditioned, the project is consistent with the visual resource protection requirements of the San Luis Obispo County LCP.

FINDING TEN: PUBLIC ACCESS AND RECREATION

Although the effluent disposal component of the project is approximately 1.5 miles inland of the ocean, it is located between the sea and the first through public road paralleling the sea, which in the southern portion of the Los Osos community is Los Osos Valley Road. As a result, the project must be analyzed for conformance both with the public access and recreation policies of the certified LCP and the Coastal Act pursuant to Public Resources Code Section 30604(c).

Due to its distance from the ocean, the project will not have any direct affect upon coastal access and recreation opportunities. However, by providing a solution to the water quality problems resulting from the use of septic systems, the project will enhance and preserve opportunities for water-oriented recreational activities, consistent with Coastal Act Section 30220.

V. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures which would substantially lessen any significant adverse effect which the project may have on the environment.

San Luis Obispo County has conducted 5 environmental reviews pursuant to CEQA since the original wastewater treatment project was proposed in 1987. Most recently, the County Board of Supervisors approved and certified the February 1997 Final Supplemental Environmental Impact Report, which includes extensive mitigation measures to address the environmental impacts of the current project. Most of these mitigation measures have been incorporated into the conditions of this permit, as they are required to ensure project consistency with the LCP. Those mitigation measures unrelated to the LCP, which flow from the County's CEQA authority and responsibility, are unaffected by the Commission's approval and remain enforceable by the County.

In addition to the project alternatives that have been considered pursuant to CEQA, a comparative analysis of the County project and the alternative proposed by the Solution Group was recently undertaken. The results of this analysis indicate that the Solution Group alternative does not offer any significant environmental benefits when compared to the County project. Moreover, based upon the input of the Central Coast Regional Water Quality Control Board (RWQCB), the Solution Group alternative, as currently proposed, does not appear to comply with RWQCB Order 83-13, and may be inferior to the County Project from a water quality standpoint.

Nevertheless, the Commission's review of this project has identified additional mitigation measures and project revisions that are necessary to achieve project consistency with the San Luis Obispo County certified LCP, described throughout this staff report and required by the Special Conditions of approval. These mitigation measures, in conjunction with the mitigation measures adopted by the County of San Luis Obispo, ensure that the project, as conditioned, will not have a significant impact on the environment within the meaning of CEQA.